The future of electronic entertainment Issue#92

EDGE®

PlayStation | PS2 | N64 | Dreamcast | PC | XBox | GameCube

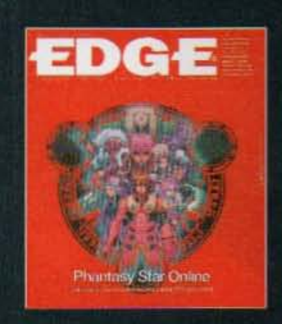
Exposed: Indrema's set-top box dream
Previewed: Sonic Adventure 2, F355 Challenge 2, Fighting Vipers 2, J-Phoenix
Reviewed: Shenmue, Majora's Mask, Driver, No One Lives Forever



Phantasy Star Online

Teamwork across timezones as Sega's stellar RPG goes global





Following the sellout of PlayStation2 upon its American debut, it may come as some surprise to see a Dreamcast title adorning this month's cover. But right now Sony's console is simply a gaming box firmly in the established sense of the phrase, running established gaming experiences in established ways, while Sega's machine is getting into its stride – at least in terms of how its more committed development devotees are pushing its cynically undervalued potential.

Enter *Phantasy Star Online* (see p50) and innovation. With it, Yuji Naka and Sega's Sonic Team are building a game world whose online multiplayer mechanic should lay the foundations for a new era of console gaming – an era which PlayStation2 users must patiently wait to sample.

But the take-up of PlayStation2 outside of Japan retains gargantuan significance. Yes, many US consumers have bought into the format simply in order to get an all-new, graphically updated fix of *John Madden*, but the format's western arrival marks a significant upturn in the videogame industry's fortunes. The unique boom-bust cycle which has characterised it since its inception 30 years ago is about to begin afresh once more, invigorated by shiny new hardware and millions of pounds spent putting it under consumers' noses in the run up to a noisy Christmas.

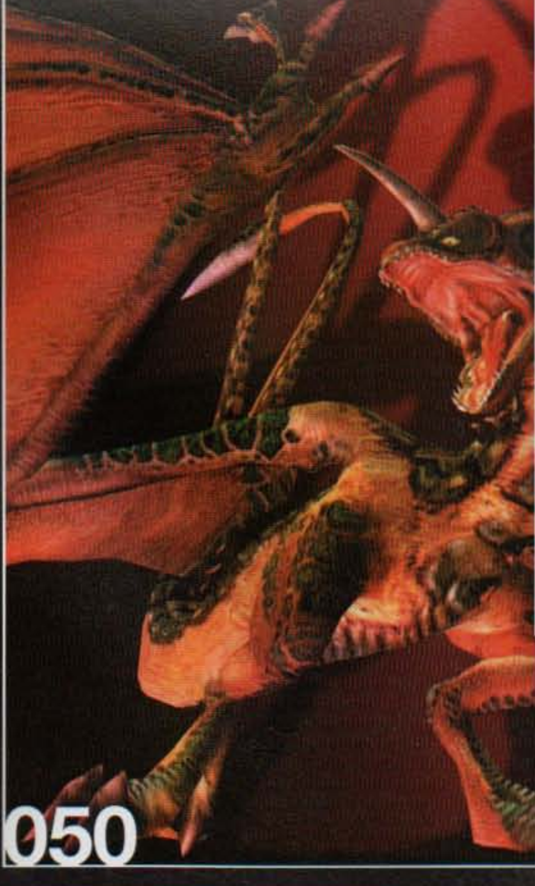
But has this particular cycle tipped Sega over the edge? As the company reports further corporate financial hardship (see p10), and premier Dreamcast releases remain underpromoted in key territories, staying on its feet in the fight against Sony looks a tougher task by the day.

Seeing the words 'produced by Yuji Naka' appearing on an X-Box or GameCube title in the relatively near future is not as fantastical as it may at first appear. After all, convergence will eventually bring every console together in some form or another, breaking down the type of brand barriers that have in fact hindered the development of videogames as an entertainment medium.

Imagine a *Phantasy Star Online* sequel being played simultaneously by a DC user in Edinburgh, a PS2 owner in Memphis, an X-Box gamer in Paris, and a GameCube-head in Bath. This kind of future may be the only way to eliminate the boom-bust cycle once and for all.

Features













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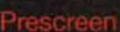


the connected issue


















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Thanks to Rik Ede of Dolby Laboratories

"Nobody's walking out on this fun, old-fashioned family Christmas"

Regulars

Testscreen

frontend

News and views from e-entertainment's cutting edge

PS2 storms into United States

Sony shifts 500,000 consoles without breaking sweat as unit provision problems and bad weather fail to dampen enthusiasm

Sony insisted the 'shortages' weren't just marketing spin. But to the 500,000 Americans who walked away with a PlayStation2 on October 26, it didn't matter anyway – the US roll-out was the most successful western console launch ever staged, taking the PS2 into the record books, and swelling Sony's coffers by a handsome $250m.

As deliveries were shipped across the nation in the days prior to the launch, news had spread that a shortage of PS2 units – approximately half the number that was originally destined for US shores – wouldn't be sufficient to meet demand. This was quickly vindicated by lengthy queues that gathered on the eve of the launch outside nationwide retail chains such as K-Mart, Best Buy, and The Good Guys – all full of anxious gamers hopeful of snagging machines that hadn't already been prebooked. While the drab parking lots of 'Any Town USA' were a poor substitute for Tokyo's 'Electric Town' (Akihabara) it didn't dampen the spirits of those who braved the cold and, in some places, heavy rain. Those who gathered outside San Francisco's gigantic Sony Metreon suffered unduly at the hands of the weather. But for anyone looking to pick up a PS2 before the rest of the nation, this temple to all things Sony was, without doubt, the place to be.

Here, the doors to the building's resident PlayStation store (the only one of its kind in the US) opened a full ten hours earlier than typical stores, offering gamers not only the incentive to ditch work or school for a PS2 marathon, but also to stay up all night practicing. The first customer in line was 23-year-old **Paul Kivda** – no stranger to queuing for long periods. "I did the same thing for 'The Phantom Menace'," he told **Edge** with pride. An avid gamer, he had taken no chances by arriving at 8pm the previous evening – a daunting 28 hours before the store opened.

By mid-evening on the 25th, upwards of 500 people trailed behind him kitted out in rain capes and PS2 sweatshirts courtesy of Sony. Clearly this was no hastily improvised effort by the Japanese company – it was a well-orchestrated PR event. The doors opened a minute after midnight and cash registers started beeping to the tune of $300.

Manufacturing problems

Unlike the UK, where PS2 pricing has come under fire, in the US, mainstream reporting of the launch focused on Sony's inability to deliver enough machines to market in time for the big day, and a number of journalists suggested that this was little more than a well-executed publicity stunt. However, according to Japanese news source Nikkei Electronics Online, shortages of PlayStation2 consoles have been traced to manufacturing problems endured by Sony and its much-touted Graphics Synthesizer chip. Allegedly, the transfer of production of the chip from a Sony-owned plant in Kobuku to newly formed company, SCE Nagasaki Semiconductor, met with problems – ultimately resulting a low yield and a drastic shortfall in the number of chips required. Sony even struggled to meet its reduced target figure of 500,000 and apparently had to switch manufacturing back again to Kobuku simply to meet this number.

In the US, mainstream reporting of the launch focused on Sony's inability to deliver enough machines to market in time for the big day

In fact, Sony managing to get PS2 on to the American market in time for October 26 was no mean feat. Delays in the machine's manufacture cut into the production schedule so severely that Sony had to factor in the cost of air freighting the entire half-million consoles to the US – at a hefty cost per unit. Anyone begrudging the PS2's $300 price tag at this stage would surely be put straight by a Sony employee armed with the right information.

Strong software line-up

Hardware may have been thin on the ground, but there was certainly no shortage of software. Some 28 PlayStation2 games arrived on American shelves in time for the launch, each priced at $50 – many even went on sale a few days early. In fact, due to reduced console shipments (not to mention a shortage of peripherals – memory cards in particular) most software companies with launch titles found themselves with an abundance of inventory that was only snapped up as more machines became available in the following weeks.

For a day-one line-up, the PS2 was



While PS2 boxes mounted up, the launch was also good news for other platforms according to reports in US newspapers

Criticism from mainstream press didn't prevent punters from braving adverse weather to get hold of a PlayStation2



Software sales began to mount up even in advance of the launch of the PlayStation2 itself, with *Madden* topping the charts



certainly blighted with its fair share of mediocrity. But there were also reasons not to prematurely consign the console to a solitary role as a DVD player. EA's masterful combo of *Madden* and *SSX* was clearly top of most buyers' shopping lists, while *Tekken Tag*, *DOA2*, *TimeSplitters* and *Unreal Tournament* all jostled for position in a line-up that SCEA promised would grow to 50 by Christmas.

Sega still strong

If anything can slow PS2 and its incredible launch figures, it's surely arch rival Sega. Despite a cheeky postcard mailed to the press after the PS2's launch expressing 'Our deepest condolences to Sony on their PS2 shipping difficulties', its Dreamcast is still selling strongly in the US thanks to a growing range of quality titles and a loyal fanbase.

At half the price and with online support in the box, Sega's machine is a genuinely attractive alternative to PS2 – at least in the short term. Certainly, it's a far cry from how the undernourished Saturn fared against the original PlayStation back in 1995.

Still, facts are facts and PS2's launch performance dwarfs Sega's success story – especially when considering how few marketing dollars were invested in getting the message out. When Dreamcast hit the shelves on September 9 1999 for $200, it may have brought in healthy revenues of $97 million in 24 hours, but it still took two weeks to sell 514,000. Similarly, it took more than two months for the N64, and more than four months for the original PlayStation, to reach the same numbers. Evidence of how PlayStation has become more than just a console – it's a brand.

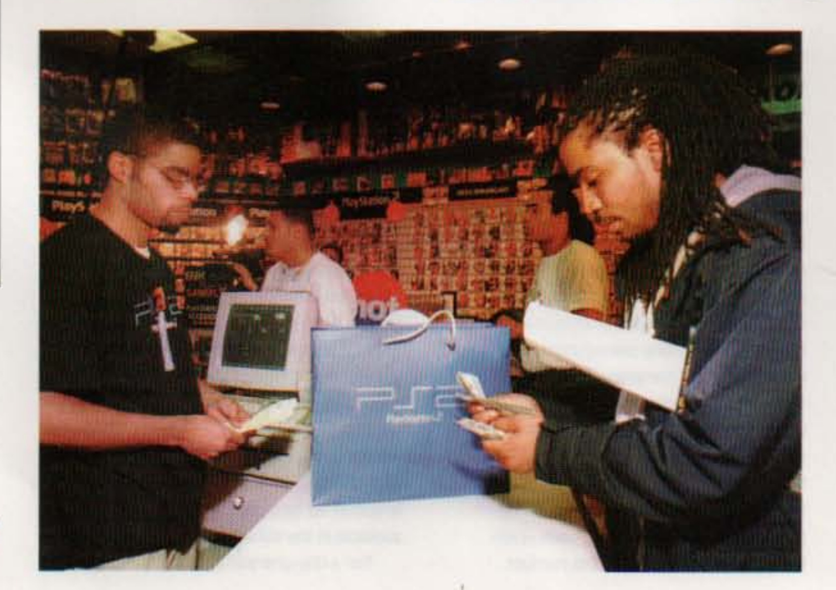
1.3 million by 2001

As the run-up to the holiday period gets a firm grip, Sony's Asian manufacturing plants will be manufacturing 250,000 PS2 units a week for Japan, North America and Europe.

If anything can slow PS2 and its incredible launch figures, it's surely arch rival Sega… Dreamcast is still selling strongly in the US

Games available on day one

Armored Core 2 (Agetec)
Dead or Alive 2: Hardcore (Tecmo)
Dynasty Warriors 2 (Koei)
ESPN X Games Snowboarding (Konami)
Eternal Ring (Agetec)
Evergrace (Agetec)
FantaVision (SCEA)
Gun Griffon Blaze (Working Designs)
Kessen (Electronic Arts)
Madden NFL 2001 (EA Sports)
Midnight Club: Street Racing (Rockstar Games)
Moto GP (Namco)
NHL 2001 (EA Sports)
Orphen (Activision)
Ready 2 Rumble Boxing: Round 2 (Midway)
Ridge Racer V (Namco)
SSX (Electronic Arts)
Silent Scope (Konami)
Smuggler's Run (Rockstar Games)
Street Fighter EX3 (Capcom)
Summoner (THQ)
Swing Away Golf (Electronic Arts)
Tekken Tag Tournament (Namco)
TimeSplitters (Eidos)
Unreal Tournament (Infogrames)
Wild Wild Racing (Interplay)
X-Squad (Electronic Arts)
Q-Ball Billiards Master (Take 2)





Several incidents reported in the news saw successful punters deprived of their newly purchased hardware by violent thugs



Shortly after doors opened to the hordes of PlayStation2-hungry consumers, units appeared for inflated prices over the Net



From this the US market is expecting 100,000 machines to come into retail channels every week – making for a targeted total of around 1.3 million systems in US homes by the end of December.

Of course, replacement stocks weren't a consideration for the hardcore fans who slept, shivered, or just played Game Boy through the night. This wasn't just about getting a one-week lead over the neighbours. It was more about making history – being part of an event that celebrated videogaming and its accelerated development into the 21st century. Either that, or prospective customers were planning to make a killing on online auction site ebay.com. In the days and weeks that followed October 26, a few machines sold for thousands of dollars, while most were trading at figures between $500-1,000.

PS2 – it's a steal

Some people were not so lucky, though. Spare a thought for 18-year-old James Wade, a University of San Francisco student who purchased his PlayStation2 (a birthday present jointly funded by his parents) at about 1am on the 26th. While stepping off a bus near his college campus he was accosted by two men who, rather than demanding his wallet, punched him into submission and then and ran off with his prized possession (and peripherals). As ever, you should never underestimate the power of PlayStation.

industryopinion

The verdict on the US PS2 launch

"I don't think there were many who thought that Sony would fail to sell its first allocation quickly, especially with reduced supply levels. In fact, the media criticism fails to take into account the fact that such was the level of demand amongst the high disposable income 20-something demographic, Sony could have priced PS2 at $500 and still sold out its first allocation.

It would be unwise to try to extrapolate future sales trends for PS2 based on its first few days' sales only. After a blazing start in Japan, sales have slowed somewhat and, critically, the tie ratio (software sales to hardware sales) is considerably lower than Sony had originally anticipated.

However, Sony will be pleased that the high level of support it received from the development community when PS2 was unveiled has been reflected in such a large volume of software accompanying the hardware's launch. With a steady flow of titles due over the next year or so, Sony has begun its PS2 campaign with a positive step towards erecting barriers to the Microsoft marketing onslaught expected next year."

Nick Gibson
Financial analyst, Durlacher

"The launch can only be regarded as a massive success. To be sold out until mid-March, as Sony currently are in the United States, represents an incredible achievement, especially as Sony has achieved this while spending comparatively little marketing money (their brand is so strong). The sheer volume of news coverage has brought the PS2 more mind share in the first days of its commercial life than any other console has ever enjoyed.

At a personal level, the interest generated in our games has been unbelievable. People stop us in the street when wearing Rockstar T-shirts and say "How good is *Smuggler's Run*?" or "I can't wait for *Midnight Club*." People seem to know everything about the launch, and the main launch titles; some stores had sold out of *Midnight Club* before the system even launched. Anyone thinking this isn't a completely new era for the games business is smoking crack."

Sam Houser
Vice president, Rockstar Games

"My concern with the launch was that Sony made two mistakes: 1) I cannot believe they did not know they were 500,000 machines short only 30 days before launch; 2) Where were all the Sony firstparty titles? They seemed to miss their own launch.

Anyway, who cares now, the machine bloody rocks, and Santa will be delivering them to close friends of mine this Christmas."

Dave Perry
Shiny Entertainment

"We see PlayStation 2 as a large, long-term opportunity and believe that in three to six months, nobody is going to remember there was a shortage at launch.

We believe that Sony will be successful in selling their goal of 100 million consoles in the next five years. As for the US launch, EA was ready with six titles: *Madden NFL 2001*, *SSX*, *NHL 2001*, *Kessen*, *XSquad*, and *Swing Away Golf* – more titles than any other publisher, including Sony.

EA's commitment to being number one on PS2 has already begun to pay off. We sold more than 40,000 units of *Madden* before PS2 was available and the title is currently number one in the US. *SSX* is number three on the platform; other titles are selling well.

The hardware shortage in Europe and the US may work to EA's advantage. Consider this: the first wave of hardware is going to end up in the hands of hardcore gamers – people who love games and whose opinion often determine the success or failure of a title. Getting *FIFA*, *SSX*, and other titles out early and with little competition allows EA an extraordinary opportunity to speak to core gamers. We believe that this is going to result in *FIFA*, *SSX*, and other EA titles being defined as the 'killer aps' – the must-have titles that everyone will need to see what PS2 can do.

Ultimately, we believe that this will translate into a market share advantage throughout 2001 and possibly through the lifetime of the console."

Jeff Brown
Senior director of communications, EA

"It's a shame that the numbers were cut at the last minute, but as far as I'm aware it was still the most successful console launch in US history, so I think it's a little unfair for people to say that the launch was unsuccessful.

Sony now have a 12-18 month headstart, and given the quantity of games in development, PS2 should be well established before there is any real competition.

The media response to PS2 games so far has been interesting. As a result of the PS2 hype and exaggerated claims of certain Japanese companies showing footage of what can only be described as 'not a game', there is a general uncertainty regarding what a PS2 game should be. As a result, many reviewers have given unfairly harsh marks to perfectly good games."

Steve Ellis
Free Radical Design Ltd

"PS2 will redefine people's expectations of what a 'game' system is by being the home entertainment system that delivers all types of media at an affordable price."

Julian Eggebrecht
Factor 5

Sega shifts focus as losses loom

Company decides to close its in-house coin-op production department and opts for a tactical withdrawal from the hugely competitive hardware market

While titles like *Quake III Arena*, *Metropolis Street Racer*, and the European release of *Samba de Amigo* may offer some hope for Sega aficionados, the company's woes are on the increase due to news that it is expecting a fourth consecutive year of financial losses. An announcement that the company plans to diversify from manufacturing console hardware towards developing software for alternative platforms also prompted widespread speculation on the Internet that Sega titles will shortly be appearing courtesy of Nintendo and Microsoft. In the event, such conjecture turned out to be premature.

Sega attributed its revised financial forecasts in large part to the recent decision to discount the price of Dreamcast in both the US and Europe to compete with the arrival of PlayStation2. The company now expects to make a loss of ¥22.1bn ($204m) from revenues of ¥320bn ($2.9bn) in the year ending March 31 2001. Its previous estimate was for profits of $130m. In response to the news, the price of shares in Sega slid to an all-time low of ¥711 (£4.6m) the following day. Financial analysts, however, were not surprised by the disclosure, and universally applauded the decision to move away from over-reliance on an increasingly competitive hardware market.

The company also outlined its strategy for the next financial year, with a strong emphasis on developing content for networked devices. Reflecting this revised focus, a management reshuffle took place, installing Hideko Sato, formerly charged with concentrating on the company's mobile phone plans, as vice president. Toshimichi Oyama and Tatsu Kayama will now be charged with supervising the company's development of online content.

Hardware diversification

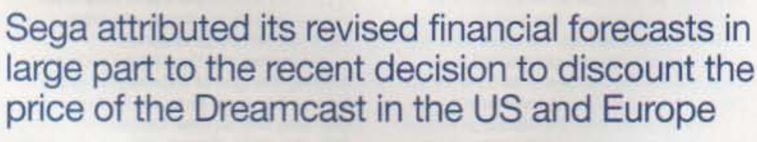
Sega's announcement that it would not be restricting itself to Dreamcast hardware in the future prompted some confused reporting of the company's intentions, specifically Sato-san's statement that Sega is "already in talks with a few foreign firms." While this was taken by many commentators as confirmation that the company's franchises will be appearing on Microsoft's X-Box, the company was actually referring to devices such as PDAs and other handheld wireless devices – including, it would seem, Nintendo's Game Boy Advance, which president and chairman Isao Okawa does not consider to be a competitor to Dreamcast. So, although Sega's software divisions are understood to be in possession of X-Box development kits, it remains to be seen whether these will be used to produce titles for Microsoft's unit.

However, there are interesting reports from Japan regarding some of the ways in which Sega may begin to focus on other types of hardware. The company is currently in negotiations with two European mobile phone networks regarding the distribution of its games, building on existing alliances with Motorola and NTT DoCoMo. Of more significance is the information that the company has designed a chip that will enable PCs to play GD-ROMs, increasing the potential user base of Dreamcast software. Talks are currently taking place that may see the release of a PCI or AGP graphics card, with a 'game' button on keyboards akin to the 'Internet' button on Microsoft keyboards.

Despite these exciting developments, Sega's financial adversities are just one of a number of difficult circumstances that the company is currently enduring. Okawa-san has been diagnosed with cancer, something which can only compound these



Sega's strong showing at the Jamma exhibition gave little indication of the scale of the problems faced by Sega

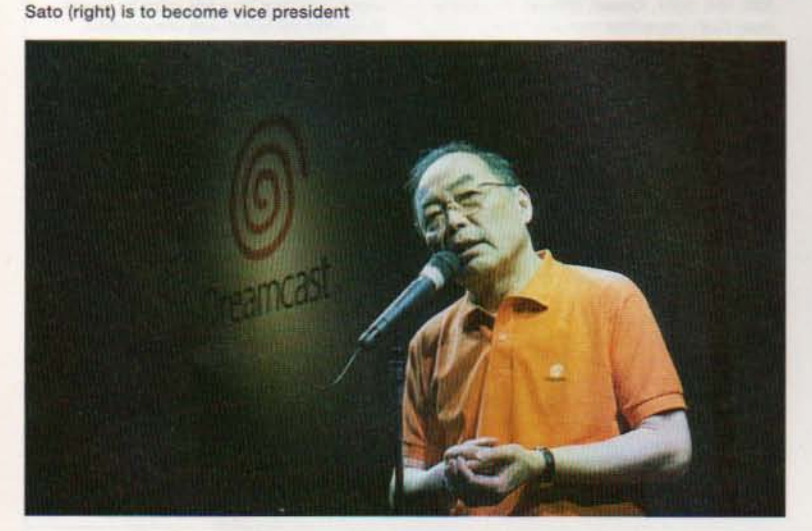


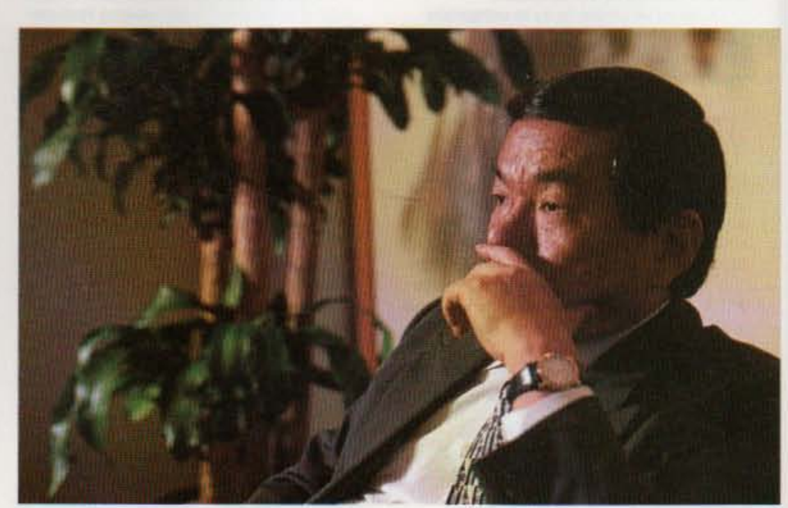
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Too few PS2

Sony has cut its preorder allocation of PlayStation2 units from 200,000 to 165,000. With many preorders still in circulation, this should not pose too many logistical difficulties for the company, which will be recalling any leftover forms, but it does raise questions for publishers and consumers. With many consumers buying the unit for its DVD capabilities, there promises to be a surfeit of launch titles left on the shelves, and any mainstream consumers hoping to still be able to pick up the unit in time for Christmas will now be disappointed. The company still stands by its forecast of 3m PAL units being shipped before the end of March next year, and good news for the rest of the industry is that the US launch of the unit has raised the profile of videogames in general among the massmarket.

The sad news that Isao Okawa (below) is suffering from ill health means Hideko Sato (right) is to become vice president







Despite the newly announced NAOMI 2, Sega has been forced to close its Yaguchi plant

difficulties, though the company is acting swiftly to determine a successor.

Coin-op closedown

Despite a strong showing at Jamma, Sega of Japan has taken the decision to close down its Yaguchi Equipment manufacturing department (previously responsible for manufacturing and assembling coin-op units), due to diminishing demand in arcades. With existing arcade cabinets being subcontracted to a large degree, this should make little operational difference, but contributes to a picture of a company in difficulty, particularly amid reports that the Entertainment STAGE net@ endeavour has met with little success.

Of more concern to **Edge** readers will be rumours that Sega of Europe has exhausted its marketing budget. Although *Metropolis Street Racer* is reportedly assured marketing spend by the contract signed between Sega and Bizarre Creations, if the news is true, it calls into question the ability of the company to capitalise on PS2 shortages. It also threatens to undermine the commercial performance of the raft of triple-A titles that are being released in the coming months.

While the company's devotees will no doubt be saddened to hear of the prospect of diminishing support for the Dreamcast, it is surely to be hoped that the company is successful in transferring its indisputable strength in software development to other platforms. With many current networked technologies currently still nascent, though, hopefully the company has the fortitude to survive the current lack of investor confidence.

Despite a strong showing at JAMMA, Sega of Japan has taken the decision to close down the Yaguchi Equipment manufacturing department



Despite a raft of triple-A titles such as *Metropolis Street Racer* (above), the future looks uncertain for Sega fans

DTI initiative for independent developers

The Department of Trade and Industry recently raised the prospect of a UK-wide trade association for independent game developers in a meeting with ten leading developers at the end of October. The concept of a trade association was put forward to identify common issues and develop a more unified voice to promote developers and raise the profile of the UK industry at a global level.

"The computer games industry is one of the most exciting of British industries," said the Government's ebusiness minister, **Patricia Hewitt**. "This meeting marks a positive step towards an independent trade association that will unify this creative sector."

Another meeting in December will consider the structure of the organisation, which it is hoped will be operational by the new year, and will be open to all independent developers.

Making the Indrema reality

Developer support boosts vision of an Linux-based, open source next-gen console to take on the might of X-Box, PS2, and GameCube



The Indrema Entertainment System (IES) is very much the dark horse in the console race, but CEO John Gildred is optimistic about its chances for success against the likes of Sony and Microsoft

Indrema specifications

600MHz processor
64Mb fast memory
Upgradeable GPU slide bay
8/30/50Gb hard drive option
100Mbps ethernet port
1 S-Video in, 1 out
1 component HD out
1 stereo in, 1 out (L/R)
1 digital audio out (optical)
4 USB universal ports
Integrated DVD player
Wireless keyboard/mouse option
Special 'DV Linux' distribution
Supports Mesa 3D, OpenAL and OpenStream
Next-generation nVidia GPU
MPEG2 dual stream HW acceleration
HDTV output supports 480p, 720p, 1080i
3D audio converts to optical out
Integrated Gecko browser and email
MP3 storage and playback system
Enhanced personal TV system
Bundled game to be announced at launch

When the Indrema Entertainment System was first announced, around the time of E3, it prompted widespread bewilderment to the point that it was even suggested that the Linux-based machine was nothing more than a hoax. Boasting a set of specifications that rival all the other next-generation consoles, but apparently appearing from nowhere, such a response was understandable, but with the company continuing to keep a low profile, not much more has been revealed until recently. First, the company sent out a press release entitled 'Top Ten Reasons To Save Your Money And Buy An Indrema' to coincide with the PS2 launch, before launching its Indrema Developer Network at the start of this month. **Edge** spoke to founder and CEO, **John Gildred**, to discuss the machine's prospects in an already crowded and competitive market.

"The idea behind Indrema was born on another late night over a year ago," starts Gildred, describing when inspiration struck. "I was playing *Quake CTF*, not very well, but still enjoying a great game with friends. The background conversation leaned in the direction of *Quake's* creator and why such an innovative game would take so long to see any action in the console market. Knowing the answer, we began throwing out what-ifs like: 'What if there was a console that allowed anyone to become a developer, with no barriers to entry; what if the console used an open-source software architecture to ensure a free SDK and level the playing field; what if the open-source architecture allowed developers to own the operating system and improve it?' The what-ifs led to a very heated debate about the nature of open source, and it became clear that the open-source model would need a mechanism for certifying games. It would have to be a system which appealed to independent developers and market movers alike."

Gildred himself comes from a background in encryption technology and software development, serving as president of OpenSoft Corporation prior to founding Indrema. The other principal members of the privately funded venture's management team include director of operations Eric Rutter, who has an extensive history with European cable TV companies, and director of sales Thomas Duffy, who worked with Gildred at OpenSoft. But what makes them think that they can take on the combined marketing might of console giants like Sony and Nintendo, and now Microsoft?

Developers offer their support

For a start the response of the development community has been positive, with more than 2,200 developers registering with the Indrema Developer Network even before the official launch of its Web site. As Gildred points out, much of this is down to the company's commitment to remove the barriers of entry that currently hinder independent developers from entering the heavyweight console market. "Those barriers are usually the high cost and the complicated, proprietary hardware on which to write games," he explains. "Indrema offers free SDKs, free distribution, a support community through the Indrema Developer Network, and an open-source operating system that is easier to write games to and makes developers feel as if they have partial ownership of the system." Harnessing hitherto untapped development talent will therefore be one part of the company's strategy for success, but the online community of Indrema developers will be just as crucial – as befits the open-source philosophy of the platform.

> "Indrema offers free SDKs, free distribution, a support community, and an open-source operating system that is easier to write games to"

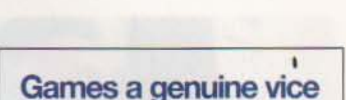
The Developer Network Web site, launched in conjunction with CollabNet – a company that specialises in collaborative software development – contains a comprehensive set of resources for developers that are considering projects for the platform. The dev kit will be available to download free and will contain several APIs, including OpenGL and a version of *Codewarrior* from Metrowerks. By offering a comprehensive suite of professional development tools, Indrema hopes to attract a large section of the development community, who will be able to share ideas



The L600 is the first in a planned series of units built around the IES specification, and will feature an upgradeable GPU



The Indrema Developer Network is a core part of the company's plans to reduce the barriers to entry faced by small developers



on the Web site. This collaborative sentiment will, Gildred argues, free developers from concentrating on technical aspects at the expense of design elements, and even allow independents to team up on larger scale projects.

More than just games

The platform also supports much more than just games, which will be available either in DVD packaging or downloadable from Indrema's game channel. Other features to be supported will be MP3 playback, TiVo-style TV functionality, and Web browsing and email. The company is keen to position itself as a console player, though, with the certification of games as the major component of revenue. "Like all game console companies, we will lose money on our hardware," states Gildred. "Indrema's business model and revenue streams centre on our certification program. Once a developer builds a game for the IES, he must get it certified to run on the system; only certified games will run on the console. We then charge a royalty for IES games, and make our money that way. The exception is with freeware games, which we won't charge a royalty fee for, but still must be certified. We will also license our hardware to certain thirdparty manufacturers and charge them royalties – and run that through a similar certification process so that only Indrema games will run on IES platforms, and vice versa." Fears that there is an apparent conflict between open-source attitudes and the solid-state architecture that is required for a console are dismissed: "The end user won't be able to tell that it's Linux-based or open-source; it will be user-friendly and have amazingly fast specs – that's the highest priority for the gamer."

Gildred is keen to point out that Indrema's specifications compare well with rival consoles, but also argues that the unit will be targeting a slightly different demographic in the high-end gamer and Linux devotee: "We're targeting the hardcore gamer and Linux devotee – that 24 per cent segment of the market that is very influential and buys a disproportionate number of games and products. We're not targeting the *Pokémon* market, so we're not running a massmarket campaign because it would dilute the message that we're a high-end, special product. The hardcore gamers will be impressed with our specs and our system, and the assumption is that they'll help us build up our brand."

The Indrema unit is set to launch in the US in spring 2001 priced $300 (£210) and a software line-up of 30 old and new titles. A UK launch date has yet to be finalised.

But while there are plenty reasons for Indrema to be optimistic, it is clear that it faces a difficult task against the better-known console brands in what is certain to be an inordinately tough market. It remains to be seen whether the unit's versatility and upgradeability will count against it in the hearts and minds of console gamers. Consumer encouragement is not necessarily commensurate with impressive specifications and developer support.

However, if the platform succeeds in removing barriers to entry for the next generation of potential Carmacks or Miyamotos, **Edge** will be in no way disappointed if the unit makes inroads into Sony and Microsoft's potential market share.

> "The hardcore gamers will be impressed with our specs and our system, and the assumption is that they'll help us build our brand"



Games a genuine vice

If researchers at the University of Bremen are correct in their assumptions, there could be an implicit link between the desire for 'just one more go' with a great videogame and the biological processes that lead to addiction. In a study, Gerhard Meyer and colleagues studied ten gamblers while playing blackjack for their own money. Later, they played for points – a 'control' situation.

With higher heart rates during games played for cash, players were evidently more physically involved – a situation that games with tangible penalties for player ineptitude, such as *Alien Resurrection*, can engender. The researchers also found that the levels of the stress hormone cortisol within the players' saliva tripled during the game. Although conclusive proof has yet to be established that increased cortisol levels boost production of neurotransmitters dopamine and serotonin, Meyer believes his studies are leaning that way.

The complicity of the two neurotransmitters in drug addiction is accepted by the scientific community; smoking, for example, promotes the release of dopamine. The two substances are a key part of the body's reward system; once the brain recognises the desirable effect of ingesting a substance, it will seek further 'hits'. While external stimulus obviously leads to the release of such chemicals – success at work, approbation of peers, and so forth – most everyday events occur on a basis that make particular situations unreasonably difficult, even impossible, to recreate. Certain activities, however, can be performed easily on a regular basis – such as sex, gambling, and, yes, videogames.

Motorola taps into gaming potential

Mobile phone manufacturer shows off its next-generation of handsets, and underlines its drive to develop new wireless applications by offering increased developer support











Motorola's management team is trying to reposition the company towards supporting software applications, including games. From top: Juan Montes, Rick Darnaby, Dominic Strowbridge, and Martin Campiche

Having attended ECTS in a bid to raise awareness of its new emphasis on application development, Motorola representatives have been touring Europe in a bid to educate selected members of the press about the potential of the company's next-gen wireless handsets. Having been impressed with the GPRS devices that were on display at the Olympia, **Edge** met with members of the company's management, including Doug Goodwin, Juan Montes, and Dominic Strowbridge, in order to witness the latest hardware developments.

The recent arrival of Juan Montes, formerly vice president of software development at SCEE, marks Motorola's determination to move away from its traditional remit as a pure hardware manufacturer and towards a focus on developing applications for wireless platforms. Montes will be charged with overseeing the company's Internet and 3G technologies.

While there were a number of conventional handsets on show, there were some that bode well for wireless gaming. The Accompli combined an impressive PDA functionality with a touch-sensitive screen, but more noteworthy was the Accompli 009, which is set for release in the first quarter of 2001. Combining a colour screen with a QWERTY keyboard, this device is capable of showing video clips, and played an impressive widescreen Pac-Man demo which would stand up favourably to software on dedicated handheld gaming formats.

It is important to note, though, that these are just 2.5G units. With such impressive videogame capabilities, it merely remains to be seen whether UK operators will stall the market by passing the inflated cost of acquiring 3G licenses on to the consumer, and whether Motorola will obtain the types of intellectual property that will ensure the unit's success as a games platform. The company has certainly made an impressive start by organising a developer conference and signing a strategic agreement with Sega.





A range of phones optimised for current WAP standards, including the V50 (left) and the Timeport 250 (right), will soon be joined by GPRS handsets like the Accompli 009 (top)



BAFTAs baffle industry

Videogames left somewhat out in the cold as more traditional forms of entertainment scoop the silverware





From top: THE's Dick Francis, Rare's Chris Stamper, Phill Jupitus and BAFTA vice president Lord Puttnam survive the ordeal

The third annual BAFTA Interactive Entertainment Awards took place on October 26 at the Royal Lancaster Hotel in London. BAFTA vice president Lord Puttnam opened the ceremony, which was hosted by a characteristically sarcastic and decidedly entertaining Phill Jupitus.

A record-setting 600 entries battled for the 18 awards, covering all areas of the entertainment field, particularly those commonly associated with traditional entertainment. A look around the room revealed a surprisingly low number of representatives from the videogame industry, with a rather significant number of new faces from the terrestrial and satellite broadcasting fields. Most successful of these was the BBC, which took home three awards (Enhancement of Linear Media, News, and Factual), with BBC Online curiously going on to receive Best UK developer.

Videogames miss the cut

Compared to previous years, there was little pure videogames material to have made the final cut. The Sport award deservedly went to ATD's Sydney 2000 from Team Soho's This is Football and Two Way TV's Armchair Manager – Football, an interactive TV application. The Mobile or Networked Award was given to Nintendo's Pokémon Yellow, and BAFTA favourite Rare took the Moving Images prize for Perfect Dark back to Twycross (which was up against stablemate Banjo-Tooie and, less threateningly, the MTV2 Web site). In the two Game of the Year categories, SCEE's Medievil II took the console honours from FRD's TimeSplitters, while, less controversially, Deus Ex walked away with the PC equivalent. Having lost out to Digital Reality's Imperium Galactica II in the Music category, Bullfrog's Theme Park World claimed the Sound award from Codemasters' Game Boy title Cannon Fodder and Thief 2: The Metal Age from Looking Glass Studios.

Back in the multimedia world, Lego bagged two awards (Children's and Learning) for its renowned Lego & Steven Spielberg Moviemaker Set, the Cartoon Network was a popular choice for the Entertainment Web site of the year, while David Bowie was awarded Best Personal Contribution to the interactive industry for launching BowieNet.

After the applause, the attendees attended to their food and, amid congratulations, accusations, and commiserations, virtually all of the members of the videogame industry **Edge** spoke to felt disappointed at the lack of videogame representation this year, feeling a change in structure was required before the proceedings evolve into showcasing the year's selection of multimedia products. A possible solution, argued some of the more illustrious industry members, would be to divide the Interactive Entertainment Awards in two, with a separate ceremony focusing solely on videogames.

While **Edge** wouldn't go as far as saying BAFTA had lost its way, given the mix of entries this year a tighter selection process may be in order for 2001.



Console game of the year went to SCEE's Medievil II, to the absolute delight of (from left) producer Andrew Kennedy, creative director James Shepherd, and lead artist Jason Wilson

A record-setting 600 entries battled for the 18 awards... a look around revealed a surprisingly low number of representatives from videogames

BAFTA winners

Games – Mobile Or Networked
Pokémon Yellow: Special Pikachu Edition
Developer: Nintendo
Publisher: Nintendo
Format: Game Boy

Games – PC
Deux Ex
Developer: Ion Storm
Publisher: Eidos Interactive
Format: PC CD-ROM

Games – Console
Medievil II
Developer: SCEE, Cambridge
Publisher: SCEE
Format: PlayStation

Moving Images
Perfect Dark
Developer: Rare
Publisher: Nintendo
Format: N64

Music
Imperium Galactica II
Developer: Digital Reality
Publisher: GT Interactive Software Corporation
Format: PC CD-ROM

Sound
Theme Park World
Developer: Bullfrog Productions Ltd
Publisher: Electronic Arts Ltd
Format: PC CD-ROM

Industry embraces outsiders

Key figures from the videogame, television, and film industries come together to discuss convergence



Jason Kingsley was one of a strong line-up of speakers from key entertainment industries attending All Together Now

Digital media consultancy KeyMI brought together representatives of key entertainment industries such as film and videogames gathered earlier this month for a conference titled 'All Together Now – the business of entertainment in the online world'. The exhibition provided an opportunity to ponder the strategic and commercial responses of these entertainment industry sectors to the impact of convergent technologies and the future of the digital economy.

The event also provided the opportunity for representatives of the videogame community to share ideas with members of the music, film and television industries, as well as with finance experts. The impressive list of speakers included Michael Jackson of Channel 4; Rt Hon Chris Smith MP, the secretary of state for culture, media and sport; musician Peter Gabriel; Jon Snow, the television presenter; Ben Andradi, president and COO of BT Openworld; Mark Bernstein, chief executive of Gameplay; Jason Kingsley of Rebellion; and Chris Deering of Sony.

Among the topics open for discussion were the relationship between videogames and cinema, and the potential of digital TV as a platform for delivering videogame content. The impact of convergence and connectivity on established business models was also considered by the attendees.

The importance of the event to **Edge** readers may appear minimal, but the attendance of such key figures from traditional media, and indeed the government, provides strong evidence that the videogame industry is seen as an integral component of a new media future. With convergence threatening to usher in an era of unprecedented end-user choice over what entertainment media they will be subject to, videogames provide an unparalleled opportunity to build online communities around common cultural experiences.



Chris Deering was another speaker at the event, which included representation from the government, showing an increasing awareness of the global strength of the UK industry

Milia 2001 welcomes indies

Independent developers offered chance to present product to publishers free of charge



Milia's Laurine Garaude is convinced that this year's event in sunny Cannes can be every bit as successful as it has in previous years



Some 40 independent developers will be given the opportunity to showcase their expertise in the Game Developer Village at Milia 2001: The World's Interactive Content Marketplace, which takes place from February 10-14 at the Palais des Festivals in Cannes. The exhibition will provide a unique chance for independent developers to demonstrate their work to thousands of companies that are set to attend.

A committee composed of representatives from Milia and its partners, Microsoft and AMD, which includes official press partner **Edge**, will select the 40 developers from hundreds of applicants. The chosen developers will be able to attend the event free of charge, taking advantage of significant commercial exposure, and of course the sunshine that sets the exhibition apart from events like ECTS.

"The Game Developer Village initiative really encapsulates so much of what Milia represents," states **Laurine Garaude**, executive director of Milia. "As a forum for new content development talent, it is innovative and influential in that it can bring immediate opportunities to both new talent and the publishing community."

Andrew Beard, of Polish developer Techland, who attended last year's event, can attest to the importance of the event for developers: "Milia is the most rewarding event from a developer standpoint. It is all about setting, people, time, and products. The Milia Game Developer Village is the right setting, it attracts the right people in the right frame of mind, usually with a bit of free time. If you have an Earth-shattering title awaiting discovery, this is the place to show it to the people in the industry that count. We signed three titles to a major international publisher based upon discussions held at Milia 2000."

With representatives from the cable TV and telecom sectors due to attend, the event is a must for any developer hoping to establish a foothold in a connected future.

For more information or an application form for a slot in the Game Developer Village, see the event Web site at www.milia.com/developervillage.





The **Edge Essential Hardware Guide** will offer definitive analysis of all key platforms at a crucial point in the industry's evolution

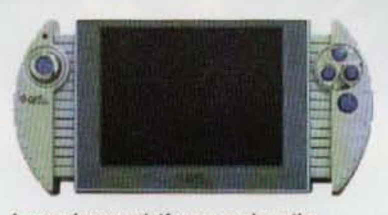
Essential Hardware Guide 2000

As the industry surges into its next generation, Edge steps back, analyses the situation, and considers the ramifications

With set-top box manufacturers and mobile phone operators trying to challenge the dominance of traditional software publishers and established console giants, the videogame industry is going through one of the most interesting periods in its history. To celebrate this fact, **Edge**'s **Essential Hardware Guide 2000**, a 116-page volume dedicated to current and future developments in game tech, will hit newsstands on December 8, featuring a cover disc (PC only) containing footage of games running on all major platforms, as well as tech demos and – to sort the committed from the casual – a quiz.

This one-off supplement will be the only available guide to every noteworthy electronic entertainment platform in the coming years, from X-Box to Wonderswan Color, taking in PDAs and cellular handsets on the way. It will provide a snapshot of what is a crucial phase for established industry players, in which broadband connectivity threatens to effect a sea change in the parameters of videogame design which is every bit as dramatic as that brought about by the leap from 2D to 3D.

In addition to offering a detailed survey of the major home consoles and handhelds, ranging from their technical specifications and the history of their development, to their strengths and weaknesses as gaming platforms, the guide will feature a number of articles concerning the past and present of the industry. How will arcade gaming keep abreast of advances in networking technology? How are nVidia's GPU chips designed? What is the largest format in the history of videogaming, as indicated by installed user base? The **Essential Hardware Guide 2000** will address all of these issues, as well as many more.



Lesser-known platforms, such as the GP32, will also feature in the guide



Touchdown: December 8, at all respectable newsagents

Edge Online to roll in December

The future of electronic entertainment meets the future of publishing, offering an extended Edge experience

The future of electronic entertainment is online. Complementing **Edge**'s monthly print incarnation, **Edge Online** is set to go live in December and will feature **Edge**'s unique brand of editorial content, including columns written by industry figures and a recruitment section that will prove the first port of call for those wishing to break into the industry.

Among the industry players that will be airing views when the site launches are Richard Bartle, currently head of online gaming at Gameplay.com and the creator of the first MUD, who will be discussing persistent online worlds; Minh Le, creator of *Counterstrike*, who will be outlining the latest *Counterstrike* developments; and Ed Bartlett, a game designer at Bitmap Brothers, whose 'Making It Big When You're Small' feature will be of interest to start-up developers everywhere.

The recruitment section of the site will extend the popularity of **Edge** Moves in allowing readers an opportunity to break into the industry. In addition to containing an extensive database of jobs available for existing and potential videogame coders and designers, the site will also contain a wide-ranging catalogue of company profiles to assist would-be applicants in their research.

Other elements of interest to visitors will include a team diary, and site-specific news and features. **Edge**'s first impressions of upcoming titles will be aired on the Web site before they are reviewed in the magazine, and a moderated forum will allow users to contribute their own opinions.

In addition to this is the LOAD™CODE section, which will showcase all manner of downloadable tech demos, from Java games and Web innovations to other stimulating slices of code. The site will also contain a preview of the forthcoming issue of **Edge**.

Log on to www.edge-online.com to grab a taste of the future of electronic entertainment online. To advertise on the Web site, call Emma Lewis on 020 7317 2604, or Emma Cole on 020 7317 2639, or email emma.lewis@futurenet.co.uk or emma.cole@futurenet.co.uk.



Edge Online will provide up-to-the-minute insights from leading industry players, as well as offering users the chance to download slabs of code and chat on a moderated forum

OUT THERE

REPORTAGE

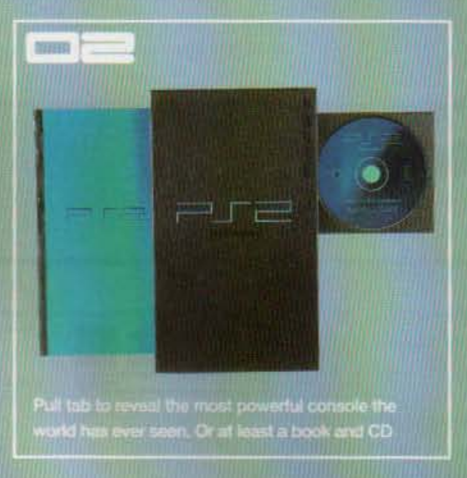


Sony has built more 'character' into the new Aibo. It will even emit sounds of pleasure

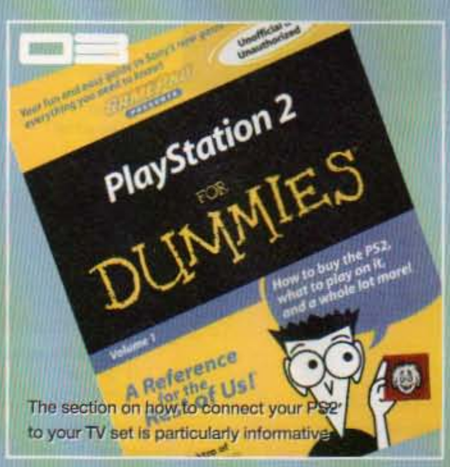


Although the latest in executive toys doesn't need to be house trained, it seems a naughtier little so and so

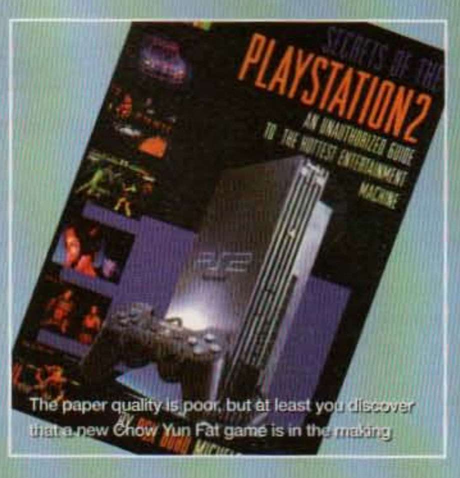




Pull tab to reveal the most powerful console the world has ever seen. Or at least a book and CD



The section on how to connect your PS2 to your TV set is particularly informative



The paper quality is poor, but at least you discover that a new Chow Yun Fat game is in the making

01 Logging on for dogs

Japan: From November 16 Sony's second-generation Aibo will go on sale at www.aibo.com. The first iteration of the virtual creature hit the headlines last June when all 3,000 sold out within 20 minutes. This time Sony has a production model which will attempt to match one pet to every order which is placed. Upgrades include enhanced voice regonition (Aibo ERS 210 can learn up to 50 words), software modules which can even make Aibo play a game based on rock, paper, scissors, and more sensitive touch sensors in the head, back and chin for a greater degree of interaction and expression. Aibo 2 will retail at ¥1,500 (£907), though upgrades and an endless supply of batteries are sure to make the pet as demanding as the real thing.

02 Pop-up PlayStation2

US: Though it may be incredibly difficult to get hold of a PS2 (units have commanded $2,000 price tags on auction sites), there remains a surfeit of publicity bumph to mollify the most impatient. Award to most eye-catching must go to Sony's own Burgopak press promo which has to be one of the most elaborate pop-up books the publishing world has ever seen. It has nothing new to say, but at least it can serve as a passable bookend.

03 Dummies go next gen

US: If you were not already convinced that Sony is about to take over the videogaming world then you should check out two publications which landed in the **Edge** office this month, if only for comedy value. In reality 'Secrets Of The PlayStation' and 'PlayStation2 For Dummies' offer the same sage opinion: Sony is about to revolutionise home entertainment by reaching out to the masses. At least one of the publications is free.

Data Stream

Total US retail percentage for PS2 software sales the week preceding its launch: **11 per cent**

Top-selling PS2 game during the first week of the PS2 launch: ***Madden NFL 2001***

Number of games available for the US PS2 launch: 29

Global marketing budget for *Driver 2*: **£5m**

Driver 2 pre-orders already registered in the US: **1.2m**

Percentage of respondees who said they would buy a GameCube according to a *Famitsu* poll after the Tokyo Game Show: **6.6 per cent**

Percentage of respondees who said they didn't know the GameCube existed: **11.5 per cent**

Top-selling game in Japan for the week ending November 2: **Game Boy *Mario Tennis***

Number of Game Boy Advance units Reuters over-estimated would be shipped on its March 21 launch in Japan: **9m**

Number of Game Boy Advance which will actually be available at launch: **1m**

Number of first-generation Aibo (ERA-110) pets produced for its initial launch: **3,000**

Number of pre-orders taken when news of a new Aibo (ERA-111) was announced last November: **132,000**

Top prize for winning Microsoft's *Links 2001* golf competition: **$100,000**

Japanese release date for *Gran Turismo 3*: **January 25 2001**

Number of PlayStation2 units expected to ship for the UK launch: **200,000**

New stock estimate for the UK PS2 launch: **165,000**

04 Sega's schadenfreude

US: Dreamcast advertising may have been low-key in the UK but the situation is markedly different in the States where Sega maintains an impressive hold on the market share. Witness this ebullient message to Sony which highlights its PS2 stock shortage on launch – from 1m down to 500,000. Not that Sega has ever failed to reach shipping targets, of course.

05 Wanted: killer typists

UK: Sega's imaginative conversion of *House of the Dead 2* into a frantic typing game is coming to the PC on December 8. The arcade version proved very popular in Japan, where **Edge** has frequently witnessed consummate pros offing zombies at the speed of a lightgun shot. A selection of new typing tutorial modes will ensure stiff competition for *Mavis Beacon*.

06 Living the dream

Japan: *GAC* and *3D Construction Set* may have started the trend in the '80s, but Sega's impressive *Dream Studio* is set to take adventure creation into the 128bit era. Would-be Miyamotos will be able to construct towns, villages, and wilderness environments with the option of providing accompanying music and spot effects. A range of creatures can also be thrown into the mix to provide drama to a narrative of your own concoction. Released in Japan on November 2, **Edge** awaits a western release date.

07 BeMani 'Boks

UK: Featuring built-in tech to measure and rate the height and pace the wearer can reach, Reebok's Traxtar trainers also display running speed in mph. Simplistic BeMani-style games are also included for users' stomping pleasure. They're for kids only at the moment, so fingers crossed for sizes nine and up.

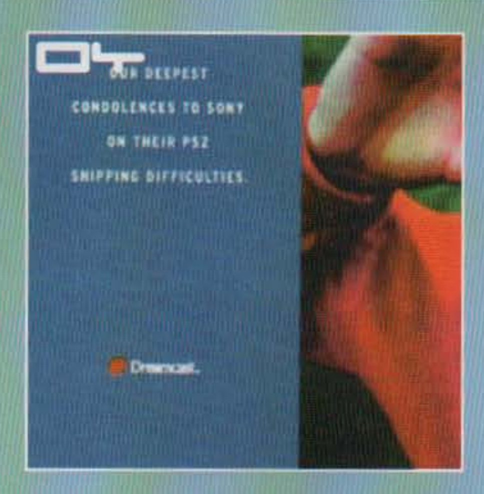
Soundbytes

"A Web site is a Web site is a Web site"
'PSX guru' **Michele E Davis** on how to garner more information about the PS2 from the Web in 'Secrets Of The PlayStation2'

"We never said this was a dog. Concept-wise it's a baby lion, which is more related to a cat"
Satoshi Amagi on Aibo's distinctive pet appeal

"The PS2 wouldn't exist without the humble, original PlayStation. That little grey box is currently in 27 million homes across the country, an has almost become a generic term meaning 'video games' the way Kleenex means tissues"
'PlayStation2 For Dummies' getting excited for launch day

"This is a new canvas for humanity that takes us back to our nature"
Trip Hawkins, quoted in Sony's Burgopak press promo





Sega shows that when it *does* get its wallet out, its ad department reveals its most subtle, refrained side





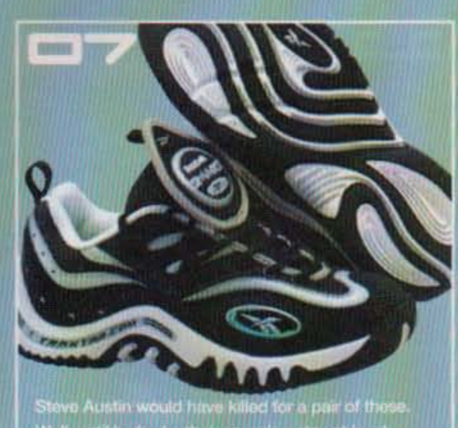
Sega's humorous typing tutorial will ensure you'll never have to key in 'judge jeffries' ever again



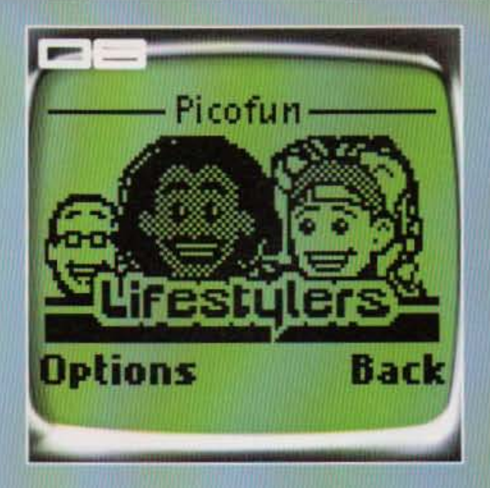


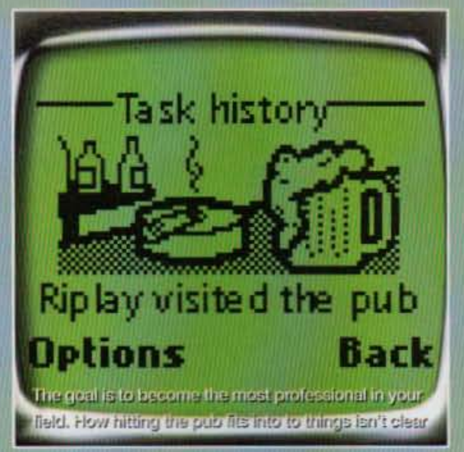
Soon you'll get the opportunity to set an RPG in places as diverse as Middle Earth and Milton Keynes





Steve Austin would have killed for a pair of these. Well, until he broke their speedometer, at least





The goal is to become the most professional in your field. How hitting the pub fits into to things isn't clear



It would appear 'Blam!!!' contestants are a little comfier around Reed than those on 'Robot Wars'





This is what happens when tea manufacturers decide to enter the realm of the Internet. Hmm






This should be the way all presidencies are won. It'd certainly make the result easier to call, for a start

08 Phone calls for Casanova

Sweden: Picofun – one of Europe's 50 Hottest Tech Firms, according to *Time* magazine – is following the success of its football management game with *Lifestylers*, a networked hybrid of *The Sims* and *Pokémon*. Players aim to become the most consummate embodiment of their chosen lifestyle, of which eight are featured in the game, from geek to Casanova, through average Joe. Interacting and flirting with other players is a key component of gameplay, as are tasks like 'study physics' or 'explore nature', both of which are essential if you are to become a champion geek and appear on the game's Web site.

09 Sky's the limit for videogames

UK: Sky's new videogame show, 'Blam!!!', started its 13-week run on November 4. Co-producer gamplay.com will offer viewers the opportunity to purchase titles seen on the show, which is presented by Julia Reed of 'Robot Wars' infamy. Featuring 'lifestyle elements important to gamers', this looks like one for those who have had their fill of the 'Bits' girls.

10 Tea tat heralds online brew

UK: Edge's postbag frequently turns up tat, but perhaps none more tatty than the rubber sandal (wrapped in foil to keep it 'two thumbs fresh') that arrived this month. Heaven knows how much Typhoo spent on this limp mailout – or what it has to do with videogames – but at least the Web site it's promoting raises the odd smile.

11 Frag the vote

US: While Gore and Bush are no strangers to the Internet – the Democrat even invented it – planetquake.com intends to spread their influence further by casting them as the latest *Quake III Arena* bots. So, regardless of the real-life success of the Texecutioner or Gore, the other will always have the chance of recapturing the flag.

Continue

The blossoming of Dreamcast
Now, if only it could get some mainstream support
New Game Boy Advance developments
Crawfish Interactive brings FPS action to the handheld scene
Far eastern videogame console rip-offs
Illegal, of course, but credit to the 'PoshStation' for making us laugh



Sony's fluctuating PS2 allocations
Er, 200,000? No, 165,000? Where will it all end?
Remembering the '80s
Shenmue revives the decade from fashion hell
The bastard British winter
Still, it's another reason to stay indoors curled up with a DC



12 Maeda@Media

John Maeda is a cult figure in digital art circles. He is known for his bizarre, humorous, distorted computer programs that evoke wonder in even the most cynical, luddite observer, and in this autobiographical retrospective of his life and work the artist lets the reader in on some of inspiration behind his creations.

Maeda explores the use of a computer as an artist's tool. At first glance, an exhibition of Maeda's work is not unlike walking into an office where several elaborate screensavers have kicked in. But his work is seldom passive. Maeda is interested in the interaction between humans and computers; his programs often distort the familiar interfaces: in one a video camera interprets movements it sees to control the mouse, in another the keyboard types newspaper cutting-shaped type like an old typewriter. It is an intimate subversion of how we believe computers to be, and it is genius. Maeda makes machines seem cheeky, almost taking the piss.

The son of a Tofu-maker broke free from his working-class background to become the MIT Media Lab's most eminent computer artist, and was recently hailed by *Esquire* magazine as one of the 21st century's Most Important People for his contributions to contemporary visual culture. For a century that has yet to begin, that's no small accolade.

Unfortunately, his genius is betrayed in print. This huge, 450-page tome is the sort of book that will soon prop up every design and new media addict's bookcase, but it offers only a faint glimpse of what Maeda is really trying to say.

13 A Parent's Guide To Computer Games

Blame for the rise of violent behaviour by children has been directed squarely at computer games. Craig Wessel believes a major problem in the debate is that adults don't know enough about them. Accordingly, he sets out to educate those readers who feel they are out of touch with their child's major pastime.

'A Parent's Guide To Computer Games' is one in a series of three slim guides (the other two being 'A Parent's Guide To PlayStation Games' and 'A Parent's Guide To Nintendo Games') that strive to address the adults' alienation and fears of computer games, and Wessel provides a well-informed overview of what gaming is all about.

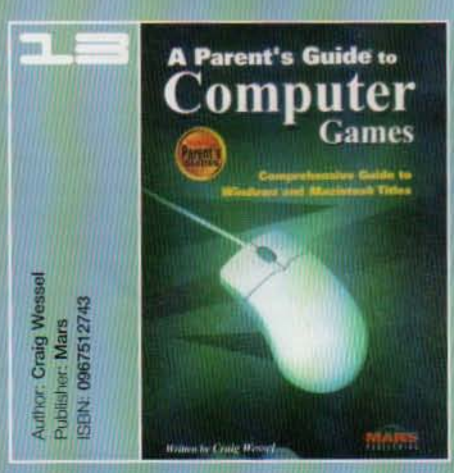
Each guide begins with a potted history of games and then sets the scene by explaining, in a simple style, what makes games interesting and exciting, what actually happens in a game, and what age group they are aimed at.

The guides reference the Entertainment Software Rating Board (ESRB) – the US body parallel to the UK's British Board of Film Classification (BBFC), responsible for issuing parental guidance certificates for games – for their classifications, and award their own 'Choice Awards' for child-friendly games.

Pictures and illustrations help to explain which consoles are which, how they work, what accessories are available, and what they each do. Wessel devotes a third of each guide to reviews of some of the most popular games on the platform the book is dedicated to. After reading these guides, it would take a particularly obstinate parent not to appreciate the merits of games and adopt a more realistic view of their potential effects on children.



Author: **John Maeda**
Publisher: **Thames & Hudson**
ISBN: **0500282358**



Author: **Craig Wessel**
Publisher: **Mars**
ISBN: **0967512743**



Site: **Songbird Ocarina**
URL: **www.songbirdocarina.com**

14 Web site of the month

It was difficult not to be seduced by the lilting melodies so prevalent in *Legend of Zelda: Ocarina of Time*. Those songs could now be a permanent part of your life thanks to a Californian ocarina crafter. Darryn Songbird offers a complete range of the instruments from the dainty Alto ($20) to a sweet potato version ($36.50) modelled on Link's very own. His Web site also provides song sheets with all the correct finger positions for tunes as diverse as 'The Yellow Submarine' and 'The Good, The Bad, And The Ugly'. Mr Songbird also gives passable renditions of selected melodies from Miyamoto's masterpiece for those with access to Real Player.



15 Advertainment

Japan: Game Boy Color *Mario Tennis* can be a life-changing experience, or so this Nintendo ad would have you believe. Still, the ability to train your player and bring him to the N64 is a neat trick

01. Ad opens on living room 02. Boy: "Mum..." 03. "... I want to be stronger" 04. Mother: "To be stronger... 05. "... you need to practice hard" 06. "Here, *Mario Tennis* GB!" 07. Boy: "What?" 08. Mother: "Play... 09. "... and take care of your player" 10. "Plug it into your N64!" 11. Boy: "Wow!" 12. "Aaah!" 13. "Nooo!" 14. "Yeah!" 15. "Wahoo!" 16. Voiceover: "*Mario Tennis GB* for Game Boy Color!"

Make no mistake: there are going to be a lot of disappointed children this Christmas. Imagine building up all that excitement only to find out that a copy of *Driver 2* has been placed beneath the fairy lights. The paper is ripped open, the child beams with delight, the father secretly hopes for a few goes himself, and then the disk is inserted into the PlayStation's CD drive… It's not that *Driver 2* is awful, it's just not exceptional.

A large part of the disappointment certainly resides in the hype that has surrounded the release (Infogrames is supporting the game with an unparalleled £5m marketing budget). But everyone is familiar with popular products being sold on nothing more than brand identity and a catchy tagline. No, what really grates is the level of misinformation which is disseminated by videogame magazines.

Without exception all pride themselves on independent, unbiased opinion. Yet most readers of game journalism have been burnt at least once by spending money on a 10/10 game which actually turned out to be a turgid product.

A good way to remedy such a situation would be for publishing houses to perhaps reconsider the way they go about fulfilling their ambitions. There are a few publications that, while naturally targeting specific sectors of the ever-widening games audience, serve their purpose commendably well. Another issue is that of journalistic standards in an environment where industry rumour, Internet gossip, and complete fabrication are happily passed off as fact, and the mistaken belief that plastering the word 'exclusive' in as many places as possible is a recipe for instant sales success. And that's before RedEye gets on to the subject of review scores.

Those with any faith in the honesty of games journalists should look away now. Still here? Okay, let's press on. Before reviewing a title most game journos do not see a game through to its conclusion. Worse, there are some who do not play the game at all before happily stamping a rating to their 500 words of plot summary. Time pressures and laziness can be blamed, but it is a sad truth that this frequently occurs in an industry which now generates more profit than the movie industry.

RedEye had the unfortunate privilege of hearing about a game 'journalist' who boasted of his game reviewing skills to a colleague in a company's bathroom. As he was commissioned by a Web site he felt it was acceptable to tell his friend that he had handed in a page of copy without even looking at the game. Unfortunately for him, he wasn't aware that the editor of the said Internet site was in the stall nearby. He was not commissioned for the site again but it doesn't stop him from writing for his monthly magazine to this day.

If only these instances of cack-handed journalism were confined to a few individuals. In RedEye's experience the venality goes much deeper. Magazine sales are fuelled by exclusives and enthusiasm, both of which serve to confound review and preview analysis. No magazine is going to place an image of the hottest new game on the front cover and then savage it within its pages. With half-finished preview code, magazines will predict the most startling things about a title. Did anyone really believe that *In Cold Blood* was going to be a cross between *Metal Gear Solid* and *Resident Evil*, only better?

More recently Sega Europe's PR representatives could not manage to send all three discs of *Shenmue* to magazines for review. Disc one and two worked perfectly, but disc three – being from a different batch and sent some time later – would not pick up the saved data from the Dreamcast's VMU. As *Shenmue* is one of the most anticipated titles in recent memory, RedEye phoned several reviewers to ascertain how they intended solve such a problem. Only two managed to play through disc three, albeit using Japanese code. The others admitted that they hadn't got that far before committing their opinions to the page. The nonchalant manner with which this was expressed was quite astonishing.

"You don't write truth and you don't write beauty – you write what you want your readers to hear." That was the disheartening statement meted out to RedEye by a rival magazine publisher. The words may drip with cynicism, but there is a depressing truth to them. Editors believe that the majority of readers do not want to hear that the game they have been waiting for since the beginning of the year is a piece of shite. When it comes to review scores there is an expected grade and an objective grade. Few magazines have the courage to go for the latter and give their audience exactly what they want to read – the irony of which is clear for all to see once money has changed hands for the finished product.



REDEYE

Commentary from inside the videogame industry

Videogame journalism: it can be a dirty business

Before reviewing a title, most journalists do not see a game to its conclusion. Worse, some do not actually play the game at all

Publishers are clearly complicit in this situation. They are more than happy to generate as much interest in their product leading up to its release. Instead of sending copies of the final review code to selected magazines they will contact one lucky publication before the product is ready, expecting, if not demanding, that it receives a glowing reception. Many a review has been written on the back of a free lunch and a romp around selected levels which haven't even been optimised. In the case of *Diablo II*, US journalists from various print magazines and Web sites were invited to Blizzard's development studios, asked to play the unfinished code, and then duly went away to deliver what were billed as full reviews.

Ultimately, poor videogame journalism has an undeniably negative effect on how the rest of society regards the pursuit. After all, other than the games themselves, the public's only real insight into this industry is through the publications supposedly covering it. There is a future for the videogame industry and the way it represents itself to the outside world. The current take certainly isn't it.

RedEye is a veteran videogame journalist. His views do not necessarily coincide with ***Edge**'s*

As the end of the year approaches, it may be salutary to remember what the biggest videogame phenomenon of 2000 has been. *Perfect Dark*? No. *Deus Ex*? Nice try. PlayStation2? Small beer. No, the big story, once again, was *Pokémon*. *Pokémon Yellow* sold one million copies throughout Europe in just six days in August; 750,000 kids entered the summer *Pokémon* championship; and the global turnover of the franchise in 2000 was a staggering $15 billion. It achieved all this running on the most rudimentary videogame chipset available today.

You might say *Pokémon* is a law unto itself, that it's a kids' fad, that it has nothing to teach the 'serious' end of the videogame market – but you'd be wrong. Fundamentally, it comes down to an argument about size, and as the woman in the car ad says, size does matter. But it doesn't just apply to what can fit in your pocket.



TRIGGER HAPPY

Steven Poole

Size: why deep is preferable to wide

Some people are size-queens. When *Metal Gear Solid* first came out and offered only around 12 hours of gameplay (at least, to complete it the first time), many gamers sniffed and said 'too easy', 'not long enough'. This argument is senseless in the wider cultural context. To say that only titles like *Final Fantasy*, which require a 70-hour trudge to complete, offer true value for money is to ignore the fact that even a shorter game like *MGS* compares well with a London cinema ticket on a pure bang-for-buck basis. (£10 for two hours, or £30 for 12?)

Similarly, we don't think a five-hour movie is necessarily better than a two-hour movie. True, there is a subculture of Wagner fetishists who think it fun – and even artistically satisfying – to sit through six hours of picture-book musical bombast, but we should be grateful that it keeps the beardy barkers off the streets. Would anyone argue that a thousand-page doorstop by Tom Clancy is better than, say, a 300-page novel by Iain M Banks, just because of its chunk? No, that's a ridiculous idea, mainly because it confuses two concepts of size.

Let's separate these concepts into 'width' and 'depth'. Width, let's say, refers to the sheer quantitative size of a videogame: the number and size of environments, the lengths required to finish it. Depth, on the other hand, would be a description of a game's qualitative size: the amount of brain-space it stimulates in the player. How interesting and complex is it? How much tension and cognitive challenge does it provoke? That's how deep it is.

It seems logical that width is usually going to be inversely proportional to depth. Development studios, after all, cannot triple the width of a game while keeping the depth at the same level without increasing the product cycle by a similar factor. And what do you get in very wide games? Numerous dull half-hours spent trudging around stupidly large maps (*Turok 2*), or scrolling through shatteringly banal text conversations (*Final Fantasy* again). Mike Singleton's *Lords Of Midnight* and Infocom's *Snowball* were dazzling novelties a decade and a half ago because they crammed thousands of 'locations' into the 48 kilobytes of a ZX Spectrum, but was each one unique and interesting? Er, no.

Genuinely exciting moments in very wide games are few and far between. Even if they can boast a similar total of such moments as *MGS*, which is rarely the case, the fact that they are more spread out makes for a watered-down and less reliably thrilling gameplay experience. Would you rather have a measure of Scotch diluted in two pints of water, or drink it neat?

It's true that some wide games also manage to be very deep – *Deus Ex* is a brilliant example – but these gems are greeted with critical and public rapture precisely because they're exceptions to the general rule. And even superb games often contain stages that deliberately hinder the gamer in totally uninteresting ways merely to stretch the width: *Half-Life* really didn't need all that precision platform-jumping, did it?

Some wide games also manage to be very deep, but these gems are greeted with rapture because they're exceptions to the general rule

But, you might say, why is width a problem, if some people genuinely like it? Because it turns off the mainstream. Remember how many copies of *FFVIII* were returned to shops last Christmas after disappointed newbies realised that this wasn't actually the future of electronic entertainment but its past: a tinselly, electronic version of Dungeons & Dragons. A certain proportion of gamers, sometimes known as the 'hardcore', are quite happy for their favourite entertainment to alienate massmarket PlayStation owners. They'll put up with the manifold failings of very wide games simply for the snob value of having a leisure pursuit that most people just don't understand. But if we put up with things like this, and always hungrily buy the latest ultrawide slab of barely interactive fantasy cheese, there'll be no reason for developers to try to improve their products, which will be bad news for everyone.

So the lesson from *Pokémon* and Game Boy is clear. The hardware itself immediately precludes any great ambition in the direction of width for its own sake. Sure, a *Pokémon* game takes a very long time to complete, but not because of pointless width – it's because the depth of the gameplay offers so many interesting combinations of monsters, and symbolic possibilities of nurturing and fighting.

While this may seem counterintuitive, perhaps PlayStation2 and X-Box will help make this problem go away. Yes, the next-gen consoles have greater storage capabilities, which might seem like an open invitation to go width-crazy, but the hardware provides a canvas that is so much broader for digital artists that a lot more work has to go into each scene to make the most of the visual possibilities. In the end, the law of diminishing returns may be gameplay's saviour. After all, the sheer number of locations never matters – it's what you can do once you get there that counts.

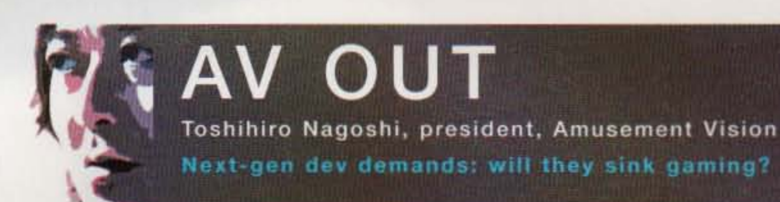
Steven Poole is the author of 'Trigger Happy: The Inner Life of Videogames' (Fourth Estate, £12). Email: trighap@hotmail.com

My name is Toshihiro Nagoshi, and I recently became president of Amusement Vision, formerly Soft R&D #4, which is part of Sega Group. **Edge** has offered me the opportunity to write a regular column, which should be interesting, so let me tell you a little about AV.

While I am the company president, I'm also the producer and director for several of our projects. I have already encountered the attitude that creatives are no good at handling figures, and that dealing with administrative matters is incompatible with making games. Handling that has been difficult at times. This was made all the more so by the fact that, predictably, I didn't know the first thing about figures at the outset. However, once you develop an understanding of financial matters, the benefits on seeing both sides of the story are immense.

Having worked developing games, I know that people involved in the process are never happier





AV OUT

Toshihiro Nagoshi, president, Amusement Vision

Next-gen dev demands: will they sink gaming?

than when they have a huge amount of money with which to realise their vision. They want the best computers, state-of-the-art software, and a huge number of people on the payroll in order to complete the project in a short space of time. While that seems like pie in the sky, especially in the current depressed videogame market, I have always operated in a slightly different way. I have always felt the tension between working towards my vision and hitting my budget.

I always used to ask whether extra money could be found, and more often than not the answer was no. While then I had little idea about financial matters, I obviously have a much better understanding now, and can determine the amount of money required for a given project and work out when best in the process to inject this cash. By being able to set these parameters I think I have been able to strike a good balance between development and the publishing sides of our operation, which is an obvious advantage.

So, while creatives are often regarded as being unable to get to grips with the money side of development, that doesn't necessarily need to be the case. My take on the situation is that creating something and making money from it aren't fundamentally different; the aim is to have a quality product that will appeal to a large number of people.

No matter how great a game will be, costs mustn't spiral out of control. A balance has to be struck. While this won't come as news to anyone in the industry, this has certainly been a good lesson to learn. Having written that, I now realise I have put myself in a tough situation. If AV cancels a project, I could be accused of not practising what I preach.

Anyway, enough about me and AV. I'd now like to turn to a subject that a lot of people in the industry are currently talking about: that of the high specs of next-generation consoles and the subsequent shift in development practice. The two are clearly linked, and can be difficult to reconcile. Firstly, it's a given that developers love high machine specs; they serve to motivate, and, on a more fundamental level, provide the raw power to bring a vision to life.

However, in order to realise the potential of these high specs you have to invest an incredible amount of time – too much time, as it happens. While this industry has developed immeasurably on this score in the last ten years, with console manufacturers as up to speed as thirdparty operations on issues such as hardware problems, middleware support, or even the process of generating a useful manual, difficulties remain. Nevertheless, even with these obstacles removed, in order to develop a quality product you often have to focus your efforts on a single title, and even then development time can skyrocket. If you look at PlayStation2 or X-Box, for example, I suggest that it remains a near impossibility to set release dates, so unpredictable is development at present. Obviously, this makes what is already a difficult job even harder – if you have no idea of what a given platform can actually deliver, developing a title for it becomes a near impossibility.

In order to realise the potential of the next-gen console specs you have to invest an incredible amount of time – too much time

So, how will the industry as a whole respond to the introduction of these powerful machines? First, let's consider small and average-sized companies, excluding those exceptions with well-known, highly skilled teams. I don't believe that these operations will be able to produce a top title. There is no way that they will be able to deliver a similar quality of product as the majors, and, as a consequence, will find it impossible to generate enough market share.

From the point of view of the majors, the situation isn't that much brighter. They will want to keep to their current release schedules, and in order to do so will have to increase the size of their teams. Recruitment will be even harder than it is now, because candidates will have to be even more skilled in order to handle the technology now involved in game development. As a result, these companies will need to reduce the number of lines they have active. The direct consequence of this will be reduction in the number of releases year-on-year, and therefore less time spent playing videogames by the public. The industry will be pulled down further as a result, and then – the end. Well, maybe I'm exaggerating, but this trend is already developing – the above scenario could change from a little joke on my behalf into a real-life situation.

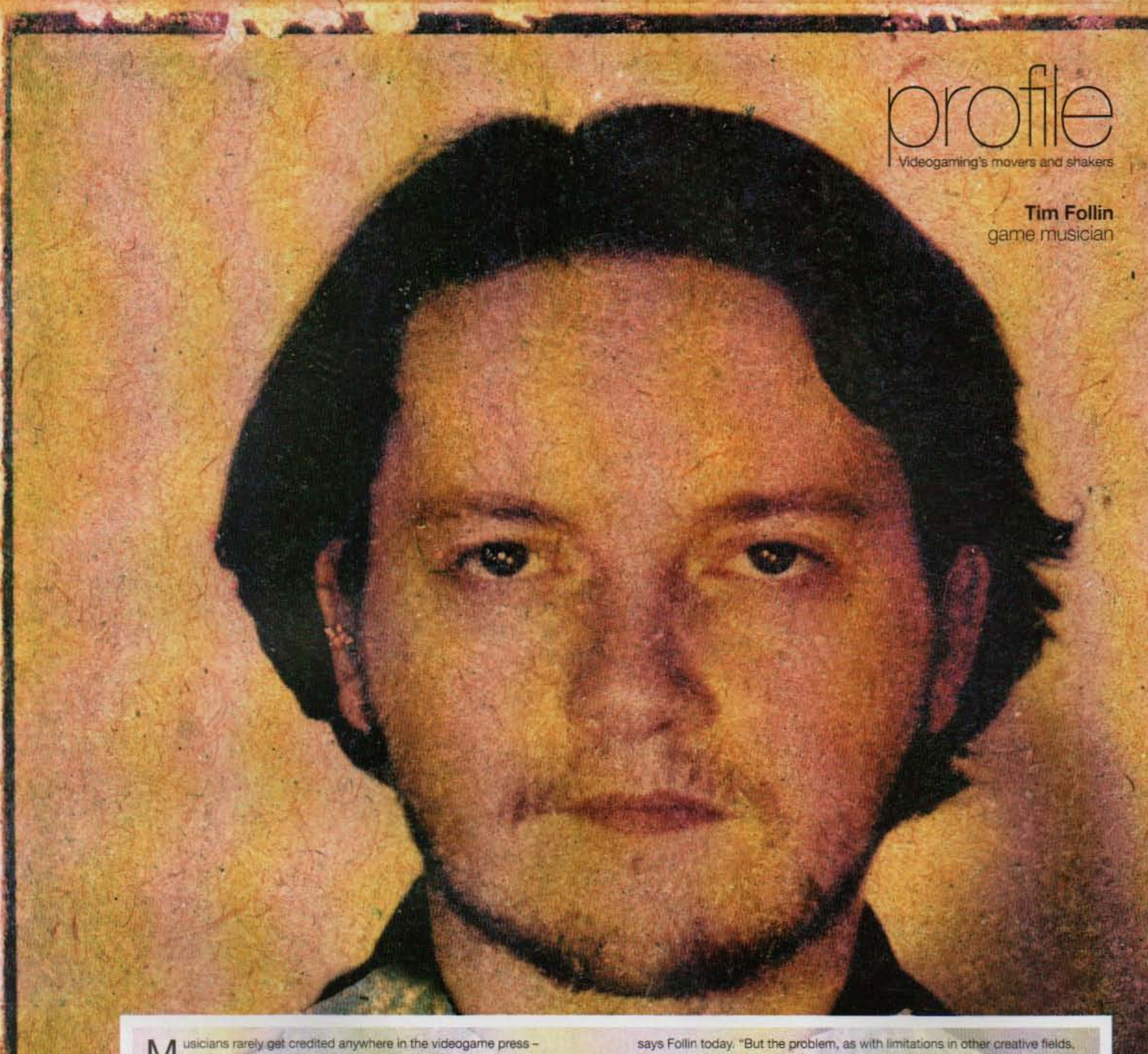
This is a state of affairs that we mustn't let happen. I love videogames, and have worked developing them for years. I'm not about to give up now, and I'm always thinking about ways to improve the experience people get from games. In the light of this, it's time to rethink our approach to making games. It is time to rethink the approach developers take to hardware in the overall process of furthering their ideas, and this is an issue I would like to develop next month.

Toshihiro Nagoshi is president of Amusement Vision, formerly Sega subsidiary Soft R&D #4

profile

Videogaming's movers and shakers

Tim Follin
game musician



Musicians rarely get credited anywhere in the videogame press – and with good reason, for so much of their work has as much artistic merit as an episode of 'Terry and June'. **Tim Follin**'s work, however, has always stood head and shoulders above that of his contemporaries. To say his output over the last 15 years has been impressive is akin to suggesting Leonardo Da Vinci was a bit handy with a paintbrush.

Follin started out at the age of 14, tinkering with machine-code audio routines on the ZX Spectrum. His brother, Mike, in need of audio for his 8bit project at the time, casually made a request for content, and Follin junior came through. But the younger sibling's thirst for discovery was only bringing itself to the boil. Elaborate experimentation followed, and soon he was coaxing three- and eventually five-channel music tracks out of Sir Clive's hardware – a format whose audio limitations were infamous.

A full-time position at Software Creations beckoned, which saw Follin produce audio for the likes of *Equinox*, *Plok!*, and *Rock 'n' Roll Racing*.

The legendary SID chip, which existed within the Commodore 64's belly, came before that, though (Follin scored *LED Storm* and *Bionic Commandos*, among many others). "I'm sure the designers of the SID couldn't have imagined the things composers and programmers were able to make it do," says Follin today. "But the problem, as with limitations in other creative fields, is that the listener or viewer often has to be aware of the limitations before they can appreciate the creativity."

Despite his accomplishments, Follin retains a reserved approach when it comes to what he levered out of many horrendously restrictive slices of silicon. "That's the thing that always depressed me about computer music," he says. "Unless you knew the limitations, which only people absorbed into the 'scene' did, the creativity really didn't mean a whole lot. You didn't – and don't – listen to chip music with objective ears: you naturally interpret it through your understanding of what the chip is capable of. It's intuitive – you don't need to know the technicalities of it. With an orchestra, for example, although you may not know what each instrument sounds like, everyone is familiar with the general sounds made by the instruments. Thus the limitations are clearly defined and known by everyone, which is all that you need to start being musically, rather than sonically, creative."

Follin's most recent work, on Dreamcast *Ecco*, is ample evidence that his creative juices haven't yet dried up, and yet, living the life of a jobbing freelancer, he doesn't seem to know what's around the corner. But whatever that may be, it's guaranteed to be worth listening to with the volume cranked up to 11.

Photography: Martin Thompson

Edge's most wanted

Legion

King Arthur and the knights of the Round Table are coming to the PS2, bringing with them stats aplenty for those craving RPG depth on a console format.



(PS2) Midway

Silent Hill 2

The first game was arguably a much more disturbing and memorable title than its *Resident Evil* rivals. Hopefully the plot will be less impenetrable this time.



(PS2) Konami

Dropship

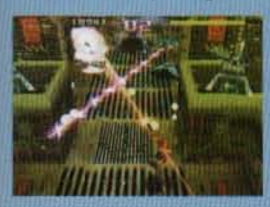
Play at Russian dolls in Sony's impressive action strategy title. Each dropship can hold several vehicles, which in turn can accommodate many more.



(PS2) SCEE

Sin & Punishment

Having missed its October launch, Treasure's very promising N64 project should make it to Akihabara before the end of the year. **Edge** will be in the queue.



(N64) Nintendo

Location, location, location

The importance of a cohesive gameworld

Fantasy and sci-fi writers have a lot to answer for. Hugh Cook and Ian M Banks may be among the best exponents of their genres, but they will persist in calling their worlds and characters ridiculous names. Peter Jones is never sufficient when Dalrinian Starcrusher is possible. Fantastical name equals fantastical world seems to be the thinking.

The same reasoning has almost always been applied to videogames. When an RTS, RPG, or adventure game is created, they will nearly always be set on Ceti Alpha 5 or in the magical realm of Neverdream. Some manage to pull it off. Richard Garriot's Britannia, for instance, has been developed over many years and serves as a cohesive vision of a single brilliant, if obsessive, mind. **Edge**, however, wonders how the *Ultima* universe will hang together now that he has left Origin.

Significantly, other worlds fail to convince, or worse, cause confusion. When confronted with an army of alien creatures bearing alien arms the player is asked to make great mental adjustments. The instructions can point out the ferocity of a Grendarnian's abdomen pump laser, but the only way you're going to really find out is by dying several frustrating deaths in-game. When every unit or character requires similar levels of research, a game can turn into homework.

Edge is not asking creatives to reign in their imagination, but it does seem strange that more developers are not tapping into the rich history and culture which has formed our own world. Spellbound's *Desperados* (below) is set firmly in the wild west, and is a significant part of history which has been largely ignored in videogames. Apart from the occasional lightgun title, and Ultimate's enjoyable *Gunfright* (1986), the genre has been panned for gold rather than mined.

7 Studio's *Legion*, too, draws upon rich source material, which while clearly not based in historical fact serves to present a cohesive backdrop. Arthurian legend has been little explored in videogames, but the mythology is one which is familiar and should present gamers with a vital, consistent universe. The player already has a good understanding of character and motivation before the game begins.

Other areas which have been underexplored in games must include the French Revolution, Prohibition America, the Crusades, the Wars of the Roses, Vietnam, and the Greek-Persian Wars. Even the creativity evident in Renaissance England has been largely ignored. A return to the past can sometimes be better than an unimaginable future.





032





040

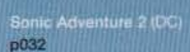




043



050



Sonic Adventure 2

Sonic Team readies the speedy hedgehog for his 87th outing in a title that will both celebrate his tenth birthday and show what Dreamcast is capable of in the right hands



Knuckles the Echidna (above) returns, here showing one of the game's vertigo-inducing moments

Worryingly for anyone in denial about their age and who fell in love with the speedy, spiked one first time around, Sonic the hedgehog is ten years old on June 23 2001. Set to be ready in time to coincide with the occasion of his appearance on Mega Drive in 1991, Sonic Team is set to produce its follow-up to the hugely successful, groundbreaking *Sonic Adventure*. The title currently looks like it will provide something of a showcase of what the coming generation of Dreamcast titles will be capable of squeezing from the platform.

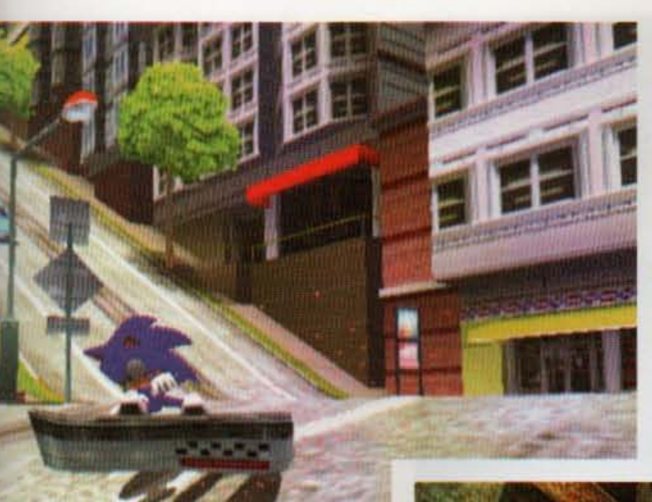
First presented at E3 in May, *Sonic Adventure 2* promised a similar brand of complex 3D graphics and thrill-inducing speed as its predecessor, but recent viewing has revealed that Sonic Team has generated texture quality that far outstrips anything seen before on Dreamcast – proving that having superior memory capacity may well count for something after all.

Levels have been constructed in order to highlight these qualities, and in addition several of them feature sense-mangling, sphincter-dilating plunges from all manner of situations. Four characters have been finalised to date: Sonic, Dr Eggman, Knuckles, and the tiny Chaos. Not all of these will be playable, but Sonic Team – with what is believed to be considerable input from Yuji Naka himself – has hinted that five 'new' faces will join the title. These will be drawn from the staggering 86 *Sonic* games that have been published on all formats to date, so the team has had no shortage of candidates to choose between.

As you would expect, Dr Eggman provides a fair amount of Sonic's opposition, and will come equipped with new modes of transport and an extended range of weapons. An added threat this time around will be the mysterious Dark Sonic, who sounds like he will fill some sort of alter ego role, and whose presence currently seems to loom large through the game as a whole.

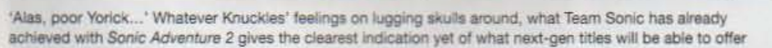
In addition to these difficulties, the player will also have to ensure that the Chaos, who return from *Sonic Adventure*, are herded together in specific spots through the game. In an interesting twist, the tiny creatures have 'emotions' in this instalment, and the player will be able to have limited communication with them in order to gauge problems and work towards possible solutions. Indeed, an additional dimension to the gameplay is Chaos management, as it were, with the player having to bring up and take care of the little mites, healing them, keep them in line, and fulfilling other guardian-related tasks. As

Format: **Dreamcast**
Publisher: **Sega**
Developer: **In-house (Sonic Team)**
Origin: **Japan**
Release: **March 2001 (Japan) TBC (UK)**


Sonic Team has handed the hedgehog some new moves for his second adventure, including the opportunity to surf through San Francisco






'Alas, poor Yorick...' Whatever Knuckles' feelings on lugging skulls around, what Team Sonic has already achieved with *Sonic Adventure 2* gives the clearest indication yet of what next-gen titles will be able to offer






Dr Robotnik (above) returns with improved vehicles and weapons with which to hinder Sonic in his tasks, but expect the mysterious Dark Sonic to pose more of a challenge to the 100mph hedgehog

in *Sonic Adventure*, the VM unit will support a number of minigames, accessed as the player progresses through the game proper, with further subgames built into the action as the plot unfolds.

Sonic Adventure 2 also sees the hero supplied with a number of additional attributes – most of which involve the way he moves – one of which is a set of shoes that enable him to 'grind' elements of the environment à la *Jet Set Radio*. The hedgehog also gets to climb aboard a surfboard to ride a breaker through San Francisco, has a crack at skysurfing in one spectacularly impressive sequence, and plans are also afoot to enable him to continue a section of his adventure deep in the ocean.

From what Sonic Team has shown to date, the visual side of *Sonic Adventure 2* seems secure, with some fantastic set pieces and imaginative advancement of Sonic's capabilities. The blue one's ineffable spirit has also been deftly retained, the extreme-sports elements in particular serving to reinforce his identity in an especially apposite way.

However, what isn't yet clear is how these aspects of the title will come together, or, more to the point, whether Sonic Team has tackled the playability problems that marred Sonic's first outing on Dreamcast. Camera glitches and niggling examples of the characters not relating to the scenery took some sheen off what was a wonderful title, although the pressure on Sega to complete the game to catch the Christmas market was, admittedly, intense.

From the effort that has been expended on this title, and the results the team has already achieved, Sega is clearly throwing everything it has at this project and wants Sonic's decade to be marked in style. While *Sonic Adventure* was a good seller, Sonic Team must be expecting even better numbers for *Sonic Adventure 2*, and on the evidence so far it looks like it may well warrant them.

The mammal who fell to earth

One of the more striking sequences from *Sonic Adventure 2* that Team Sonic has presented to date shows the hedgehog leaping headlong out of a helicopter and indulging in a spot of skysurfing. While this is a fun gameplay element in itself, combined with Sonic surfing the streets of San Francisco and his new ability to 'grind' suitable surfaces elsewhere in the game environment, it shows how canny Sonic Team is being in branding terms. Clearly Sega is well aware of Sonic's appeal, and while *Sonic Adventure* certainly developed his 'personality', by having him indulge in extreme sports – which, while hardly fresh in videogaming or real-life terms do carry a certain cachet – fits perfectly with existing perceptions of his identity, and yet represents a real progression. With any luck, the gameplay these sections offer will measure up to the thinking behind them.





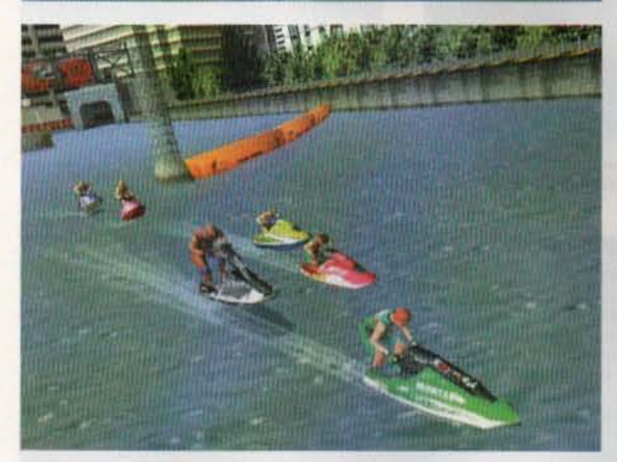


Power Jet Racing 2001

Format: Dreamcas
Publisher: CF
Developer: In-hous
Origin: Japa
Release: 2001 (Japan) TBC (UK

Skim over waterways in New York, the Caribbean, and deep underground in CRI's jetski racing title, which seems set to bring a little of the *Wave Race* dynamic to Dreamcast





CRI is determined to generate water animation that both looks stunning and serves as a element of the gameplay, with currents and eddies affecting the speed and direction of your jetski





While you would have thought that jetskiing has had every drop of gaming potential wrung from it with high-profile coin-op releases from the likes of Sega, Namco and Konami having run rampant in arcades in the past, CRI is determined to tug the race subgenre on to the next generation with a similar title for Dreamcast.

Nintendo is the only developer to date that has managed to really nail the activity, thanks to its celebrated *Wave Race* series – for which a slot on GameC ube beckons – bu CRI is determined to follow in the franchise's wake with *Power Jet Racing 2001*.

What's already clear is that the player will be able to choose between six characters each having a different riding style and specs. At the moment 13 stages are planned, with environments taking in urban rivers such as the murky Hudson in New York, underground streams, whitewater rapids, turquoise Caribbean seas, and more common or garden waterways. The title follows no real trajectory, as opposed to the likes of *Gran Turismo* – instead the emphasis is on action rather than development.

The water is set to include realtime current, eddy, and flow effects, but these are taken to their logical conclusion in that the player will have to focus on the way the water is moving in order to take full advantage of any developments, or avoid difficult areas as they appear. Incorporated into the raceways will be opportunities to perform jumps, with midair tricks netting the player time bonuses. With a checkpoint structure and obstacles strewn through the course impeding progress, time is very much of the essence, and tricks may be eschewed in favour of straight line speed.

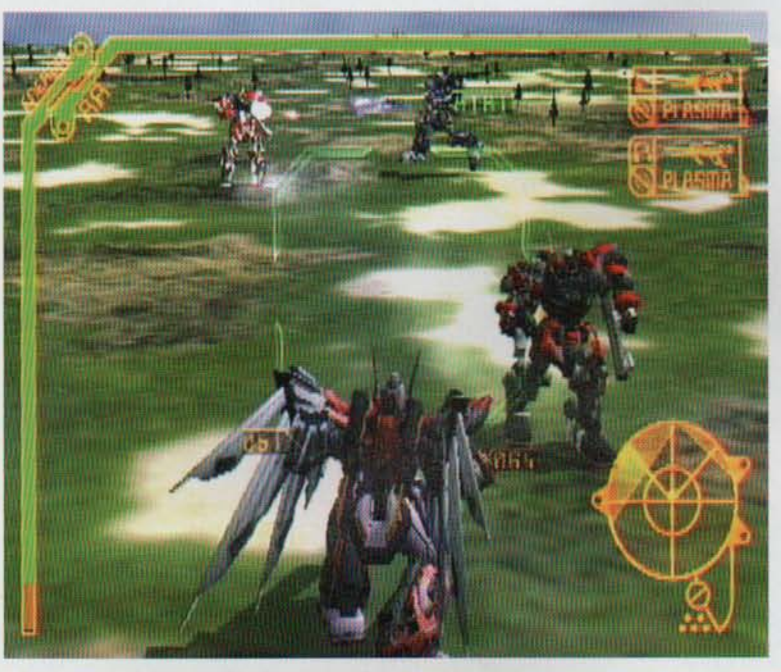
Championship mode features three difficulty levels – first heat, second heat, and final – which determine factors like opponent AI and the number and positioning of obstacles. A Time Attack mode is also included, and a Vs mode provides twoplayer splitscreen competition. A Training mode enables the player to improve his jetskiing skills, although the controls, which combine a single button for acceleration with the analogue stick, are definitely in the pick-up-and-play mould. Nevertheless, the opportunit to develop trick skills is more than welcome.

Although nothing has been confirmed to date, CRI may build an online option into the game, enabling multiplayer play using the Dreamcast modem.

J-Phoenix

Format: **PlayStation2**
Publisher: **Takara**
Developer: **In-house**
Origin: **Japan**
Release: **Q1 2001 (Japan) TBC (UK)**

The rise of the mecha continues as Takara announces its second PlayStation2 project, which features massively customisable battle robots and a host of multiplayer modes



Hot on the heels of multi-vehicle racing game *Choro-Q HD* (prescreen **E**91), Takara presents its second PlayStation2 project, *J-Phoenix*.

Set in the burgeoning and rapidly improving mecha genre, the 3D robot action title carves out a niche for itself by requiring the player to assume control of not one but two developing scenarios.

In one, the situation is that you fulfil the role of commander, the idea obviously being that in this aspect of the game the tactical aspects of mecha warfare must be addressed. The second casts the player as a crack pilot, the combat potential of which is clear for all to see.



Takara intends to imbue the missions in the game with a wide range of gameplay styles and potential; on the cards already are straightforward enemy destruction, attempts to infiltrate enemy bases, and a number of variations on the air combat theme.

The players controls a mecha called the Panzer Frame, which, although powerful, is vulnerable to a number of different attacks in the battlefield. Prominent amongst these are traps, other robots, tanks, spider robots, and helicopters. However, the Panzer Frame packs a fair punch itself, and comes tooled-up with blades in the form of swords and axes, machineguns, shotguns, and a more specialised variety of offensive capability in the form of lasers and smart bombs. The higher end of these measures is acquired by conducting research into new technologies, the net result being a state-of-the-art arsenal.

However, while customising your mecha is positively encouraged, in order to avoid a situation whereby a ridiculously tweaked mecha can sweep all before it, certain limits are set by the game. These include its weight, a limited number of lock points for weaponry, set resistance to attack, and a cap on energy levels.

Nevertheless, it is possible to update your creation to the extent that it is no longer bound by the laws of gravity, with a jetpack available to see it take to the skies. There's even a option to upgrade this, offering increased flight time.

Happily, customised mecha can be saved to memory card, and be set against another player's metal monster. This can be achieved in any one of a number of single-screen multiplayer modes, and as many as six robots can be set against one another. These include a three vs three, two vs three, and a one vs three option. With the quality of mecha games steadily improving with every release, the genre looks to be flourishing.

J-Phoenix offers a wide range of multiplayer modes, with as many as six players able to pit their heavily customised mecha against those of their fellow players. The oneplayer game also offers an interesting degree of variety, with the player expected to command an army in battle while also functioning as an ace pilot













Fighting Vipers 2

Format: **Dreamcast**
Publisher: **Sega**
Developer: **In-house (AM2)**
Origin: **Japan**
Release: **January 2001 (Japan) TBC (UK)**

The sequel to the innovative *Fighting Vipers* is being ported from coin-op to Dreamcast, but looks unlikely to set the beat 'em up world alight, despite quality characterisation



It is tempting to rewrite history when armed with the benefit of hindsight. So it would perhaps be presuming too much to argue that the interactive, multi-tiered arenas of modern day beat 'em ups owe a substantial debt to the walled rings introduced in the superfast *Fighting Vipers*. But it is fair to say that when the game was presented to arcade-goers five years ago, this feature, along with several other novel twists, introduced a new dynamic to the genre. While it never engendered the same degree of fervent support that the likes of *Tekken* and *Street Fighter* did, news that the sequel, *Fighting Vipers 2*, is to appear on Dreamcast is likely to cause a flutter of excitement in the hearts of those who succumbed to its charms first time around.

Beyond using walls to slam opponents into and through, the player must also get to grips with the implications of the game's armour-wearing characters. If this is destroyed through the course of a bout, the balance of play can fundamentally shift as one combatant is left devastatingly vulnerable to the other, albeit a touch faster. Special moves can also be used to engineer an apocalyptic end for opponents – by bringing a meteor down on their heads, for example. The usual selection of game modes is available, from Training to Survival. There is also the possibility that the game will support the DC modem, but no details have yet emerged as to how this may be employed.

The calibre of the arcade conversion is assured by the presence of Kataoka Hiroshi, who has been involved with the series since its conception, and who has also garnered an impressive CV that boasts *18 Wheeler* and *Out Trigger*. The additional presence of Katagiri Daichi will surely guarantee a technically efficient port. Whether AM2's tried and tested technique of staying true to the arcade original in terms of structure is another question. The Dreamcast has already witnessed the sumptuous and elaborate *Soul Calibur* and the wide-ranging environments of *Dead or Alive 2* and *Power Stone 2*, leaving the two-year-old *Fighting Vipers 2* scrapping for a prominent place among this roster of beat 'em up behemoths.

Attempting to simultaneously maintain your character's armour intact while trying to damage your opponent's protection certainly lends the game a hyperspeed cat and mouse feel, which should distinguish it from lesser proponents of the genre, but it is unlikely that the title will meet the mainstream success that Sega and Dreamcast need so much right now.







When *Fighting Vipers 2* was introduced into arcades, it was a viable competitor to the likes of *Virtua Fighter*, but in the light of some groundbreaking home conversions such as *Soul Calibur* and *Dead or Alive 2*, it may seem a little dated

Product placement

Although the beat 'em up industry may have taken some inspiration from the level design in *Fighting Vipers* and its successor, one thing that it hasn't quite taken to heart is the rampant product placement embodied in the persona of PepsiMan. Ranking alongside such luminaries as Michael Jackson, the Spice Girls and Jackie Chan, this character sought to undermine the ubiquity of Coca Cola in addition to seeing off his foes in the ring. It is little wonder, given the other constraints on his time, that despite more consumers preferring Pepsi in blind taste tests, Coca Cola continues to outsell its competitor.



Where the game does stand out is in the choice of some truly varied characters, and the introduction of body armour to the usual beat 'em up proceedings, but although this adds an interesting dynamic to the pace of combat, it's unlikely to be enough to win over the mainstream

Charge 'n' Blast

Format: **Dreamcast**
Publisher: **Sims**
Developer: **CRI**
Origin: **Japan**
Release: **December 7 (Japan) TBC (UK)**

Discover just why the SAS set such store in keeping their weapons in pristine condition in a shoot 'em up that has you wrestle with rusty reload times in the heat of battle

Charge 'n' Blast presents a novel take on the 3D shoot 'em up on Dreamcast, deliberately posing the player with the quandary of slow weapon reload times, requiring tactics reflecting the game's title.

Playing like a cross between *Virtua Cop* and Neo-Geo game *Nam '75*, *Charge 'n' Blast* offers three playable characters, each of whom brandishes their own bazooka in order to navigate the game's five, enemy-packed stages set in environments ranging from the ocean floor to futuristic cities. The bazookas come equipped with three different types of rockets, one of which is specific to the character. Choosing between these is key, as the variety of ammunition determines reload time – simple rockets drop straight in, lock-on missiles take longer. The dedicated player can also deliver a 'super shot' by concentrating firepower on a set point, before delivering a killer blow capable of flattening a building.

Co-operative twoplayer and Time Attack modes add a degree of variety to proceedings, and while *Charge 'n' Blast* looks to be a solid, dependable, and honest example of the genre, the developer may have been better served to give the action more of an arcade spin.







Charge 'n' Blast's central conceit of rendering reload times variable depending on the bombs the player selects for his mortar results in an interesting action dynamic. However, CRI may have been advised to give the proceedings more of an arcade feel, as the premise definitely lends itself to such an approach

The Rhapsody Of Zephyr

Format: **Dreamcast**
Publisher: **Softmax**
Developer: **Falcom**
Origin: **Japan**
Release: **January 2001 (Japan) TBC (UK)**

Navigate the labyrinthine social rules of quasi-18th century aristocratic wranglings in a title that blends swords and sorcery with the ramifications of an ill-starred romance







One of the primary attractions of *The Rhapsody Of Zephyr* in South Korea and Japan has been its graphics. Falcom's Dreamcast version has remained true to the title's 2D aesthetic, while incorporating 3D effects for magic and special effects scenes. A twist on the RPG norm is the inclusion of a grid-based combat system (above)

Since its initial release on PC in South Korea in March '98, RPG *The Rhapsody Of Zephyr* sold 130,000 units in the country. Falcom, the company which won the rights to adapt the title for the Japanese market, has now produced a Dreamcast version.

At first glance *The Rhapsody Of Zephyr* remains true to its PC origins. The action takes place in 2D – with the DC providing 3D effects representing attacks and magic, especially in combat – and follows the story of the aristocratic Cyrano Bernstein. Set in an 18th century-style society racked by family power struggles and riven with betrayal, Bernstein is jailed after an ill-advised romance. While there he meets a minor god, who lends him his remaining powers and urges him to locate the Ashura sword of darkness.

One of the more interesting gameplay elements is the inclusion of a novel battle system. Instead of a *Final Fantasy*-style 'background switch', a grid overlays the scene, across which the player moves in order to attack or avoid injury. Weapon selection is key, as arms also serve as defensive tools, armour not being included.

Use is made of the Dreamcast modem, with the player able to access information on the company Web page, but as yet online play isn't an option.

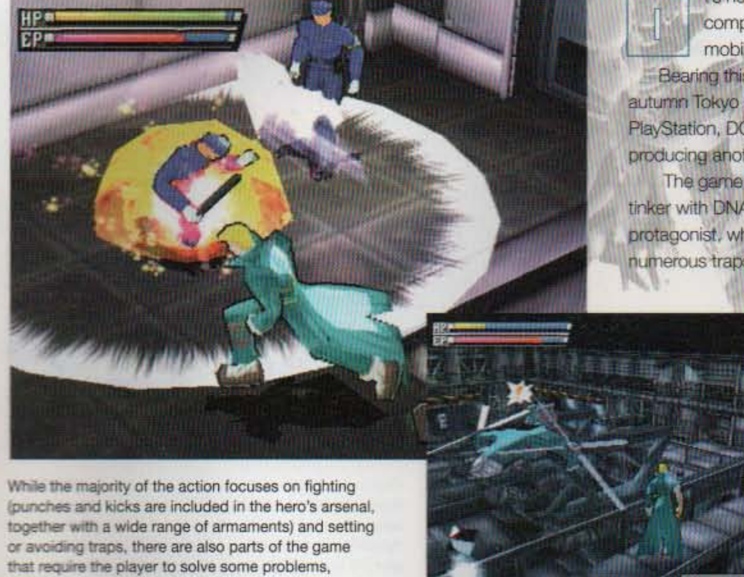
Dark Native Apostle

Format: **PlayStation2**
Publisher: **Hudson**
Developer: **In-house**
Origin: **Japan**
Release: **December (Japan) TBC (UK)**

DNA tinkering has resulted in the generation of horrible monsters that only a long-coated, 'toon rendered' man with a cybernetic arm can effectively combat







While the majority of the action focuses on fighting (punches and kicks are included in the hero's arsenal, together with a wide range of armaments) and setting or avoiding traps, there are also parts of the game that require the player to solve some problems, the level set in ruins being a prime example

It's no secret that Hudson currently finds itself in difficulties; the company's recent announcement that it has shut down its mobile gaming operation is clear evidence of that.

Bearing this in mind, and given that Hudson made it clear it at the autumn Tokyo Game Show that it was developing *Bomberman* titles for PlayStation, DC, and PS2, it comes as something of a surprise that it's producing another PS2 title – *Dark Native Apostle* (*DNA*).

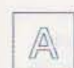
The game is set in a laboratory complex that has been used to tinker with DNA, resulting in the generation of terrible monsters. The protagonist, who sports a bionic arm, must fight these and avoid numerous traps while searching for the root of the problem. The action covers seven stages, each of which features an end-of-level boss. Power-ups come in the form of bio chips, which can be inserted into the cybernetic limb, accessing new abilities and firepower. These can be switched according to the situation.

CG and realtime 3D cut-scenes set the scene, and all dialogue is in English. *DNA*'s anime styling also serves as a reminder that *Jet Set Radio*, while not clocking up the expected sales in Japan, has had a significant impact. Hudson calls the technique it uses in this title 'toon rendering'.

Technictix

Format: **PlayStation2**
Publisher: **Arika**
Developer: **In-house**
Origin: **Japan**
Release: **January 2001 (Japan) TBC (UK)**

Puddle puzzling from the developer that brought *Tetris Grand Master* to the arcades offers gamers some cute styling and an interesting tweak of the Bemani template



Arika, the developer that brought *Tetris Grand Master* to the arcades, is back with intriguing music-and-water-based puzzle title *Technictix* on PlayStation2.

The rectangular game area is covered with water, and the player moves a cutesy cartoon character across the surface using the D-pad or analogue stick. When the music starts, 'sound markers' appear on the surface. The player then has to manoeuvre his character into a position on the game surface before performing a 'sound round'. At this point a ripple, the 'sound wave', emanates from under the character's feet, moving out through the sound markers. When it hits them, a sound is generated.

The object of the game is to time the start of the sound wave so that it hits the markers to produce sounds in time with the music. While this sounds complicated, the principle becomes clearer after a few minutes of play.

Four basic modes are included: Tutorial, Versus, Free and Performance. Performance is divided into oneplayer, twoplayer, and a twoplayer co-operation section. The music has a distinctly techno tinge, and the company plans to produce a data disc which will introduce new characters and tunes. Further features are planned.



In terms of graphics, *Technictix* clearly looks to be taking advantage of what PlayStation2 has to offer, especially in terms of the water effects generated in the game. The gauge at the top of the screen measures 'tension', and reflects the player's levels of performance





Twisted Metal Black

Format: **PlayStation2**
Publisher: **SCEA**
Developer: **Incognito**
Origin: **US**
Release: **Q2 2001 (US) TBC (UK)**

Sony attempts to breathe new life into both the vehicular combat genre and the *Twisted Metal* series with a very non-PC take on driving like a madman

At first, the announcement of a PS2 update of a flagging PlayStation car-combat series may seem like another clumsy business move by Sony. However, this one actually might pay off. After the disastrously uninspired *Twisted Metal 3* and *4*, the team behind the original two games is back on board.

The result is a title that's as dark as it is violent. The contestants come straight from an insane asylum. The vehicle models are far more detailed than ever before, with textures that look fantastic. The mood is threatening, and the special effects are looking truly impressive. Included among these visual niceties are particle effects, unique weapons (such as a pair of missiles that weave back and forth before hitting their target), and huge, moving environmental objects – like a massive runaway ferris wheel.

It's apparent that the developer is not holding back in the innovation stakes. In fact, at one point, one of the most familiar of the game's 14 vehicles, Sweet Tooth, transforms from a weapons-heavy ice cream truck into a creepy clown robot in the midst of a battle. If there are similar elements hidden throughout the game, Sony may have a winner on its hands. The company needs a few more games like this to call its own right now.







Particle effects and enhanced explosions are just a few of the goodies to be added to *Twisted Metal Black* in the hope of revitalising the somewhat moribund vehicular combat genre. If Incognito can incorporate enough twists and special effects, there's little reason for gamers not to be attracted by the proposition

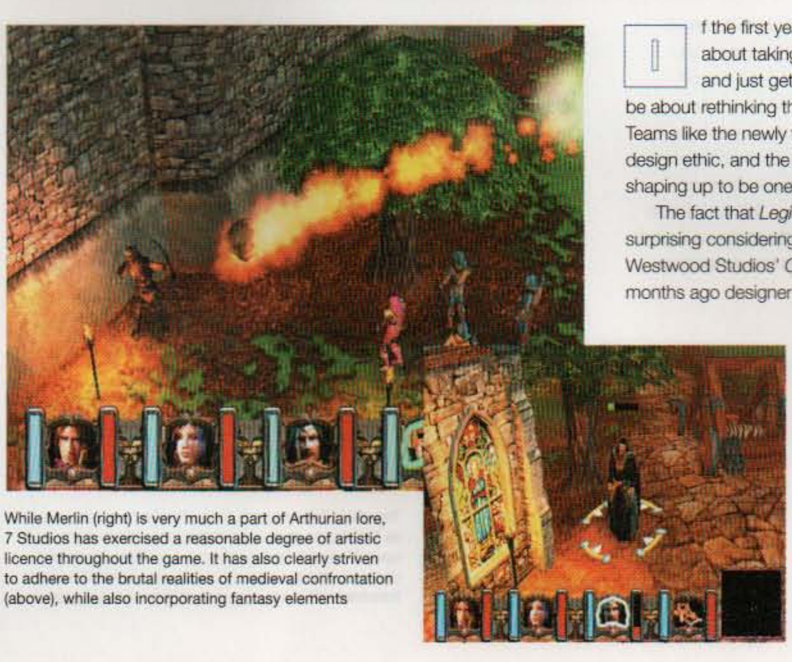
Legion

Format: **PlayStation2**
Publisher: **Midway**
Developer: **7 Studios**
Origin: **US**
Release: **Q3 2001 (US) TBC (UK)**

Join King Arthur and the knights of the Round Table in a PlayStation2-based realtime strategy quest with magical overtones that's shaping up to be a top title for 2001







While Merlin (right) is very much a part of Arthurian lore, 7 Studios has exercised a reasonable degree of artistic licence throughout the game. It has also clearly striven to adhere to the brutal realities of medieval confrontation (above), while also incorporating fantasy elements

If the first year of PlayStation2 development has been about taking current game trends, making prettier versions, and just getting the titles finished, then the second year will be about rethinking the current standards and delivering quality product. Teams like the newly formed 7 Studios are the epitome of this new design ethic, and the company's first game, *Legion*, is already shaping up to be one of 2001's premier products.

The fact that *Legion* is, at heart, a realtime strategy game isn't surprising considering many of the staff working on it come from Westwood Studios' *Command & Conquer* team, and that several months ago designer George Collins came in from Pandemic Studios, developer of *Battlezone* and *Battlezone II*. Unlike most console strategy titles, *Legion* has been designed from the ground up for PlayStation2, with everything from the graphics engine and the camera to the controls designed with the strengths and limitations of the platform in mind.

The subject matter – King Arthur and the knights of the Round Table – is underexplored in videogames, but early videos show not only knights and archers battling it out, but magic, giants, and other fantasy elements.

Kuri Kuri MIX



Format: PlayStation2
Publisher: From Software
Developer: In-house
Origin: Japan
Release: December 7 (Japan) TBC (UK)

Scenes of multiplayer madness are guaranteed as From Software combats its small developer status by producing a striking title in which players share a single joypad







What it lacks in conceptual depth and sophistication, *Kuri Kuri MIX* more than makes up for in terms of quirky originality. The vertically scrolling graphics are a riot of colour, and the idea of having two players share a joypad will doubtless result in some interesting off-screen action

Smaller developers are combating the fact that they can't afford to spend as much time on next-gen development by focusing on individuality, and From Software's *Kuri Kuri MIX* is a classic example.

This multiplayer title ups the party ante by having two players share the same joypad, each using one of the analogue sticks and the corresponding shoulder buttons. The twoplayer Story mode is co-operative, requiring players to work together to defeat adversaries, solve puzzles and avoid traps while traversing the game worlds, which are made up of five stages.

The screen scrolls vertically, and splits if a player lags behind – a state of affairs that incurs a time penalty. Items collected through the game unlock new features, and if the players can collect all four parts of a portrait, a new character can be accessed in the fourplayer Vs mode, which also operates the shared joypad system – so there's no need to invest in a multitap.

Another feature included in the game is the ability to zoom the camera in close to the action. If only because of its joypad-sharing charms, *Kuri Kuri MIX* is worth casting an eye over, the key being the price at which From Software decides to market it at.

Crash Bandicoot

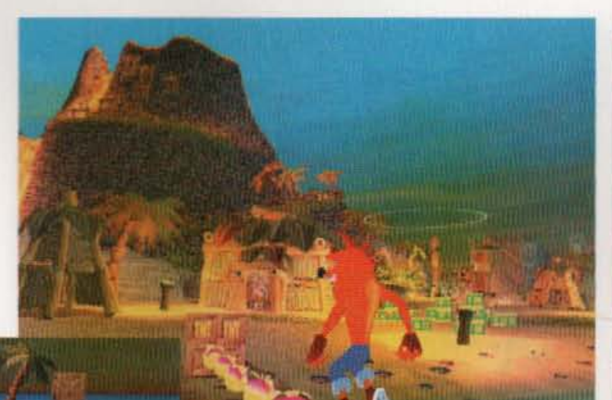
Format: PlayStation2
Publisher: Konami
Developer: Traveller's Tales
Origin: UK
Release: Q3 2001 (US) TBC (UK)

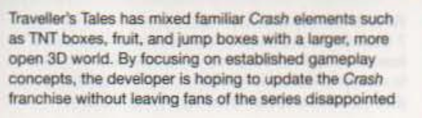
The bandicoot is back, the task of leading him into the next generation handed to UK developer Traveller's Tales, which has generated a new 3D world for him to explore

This next-generation *Crash* game, developed by Traveller's Tales after Naughty Dog committed itself to a yet-to-be-announced PS2 project, focuses on simple, fast-paced action. This time you'll have the opportunity to control Coco, but the game looks similar to the PS instalments, with improved graphics.

The popular vehicle-riding segments are back with new means of transportation, and the wild chase sequences have also returned. Instead of being pursued by a rock, bear, or dinosaur, this time Crash is trying to outrun a massive avalanche depicted with gorgeous particle effects. Platform standards such as lava worlds and snow worlds are featured, as well as a lake of liquid mercury.

Given the *Crash* series' gameplay to date, there are a few worries on that score, but concerns remain. Universal plans to port the game to X-Box and Gamecube. A cross-platform port in this technologically varied console generation won't be as likely to take full advantage of each platform's strengths. Another issue concerns the Japanese version. Naughty Dog turned *Crash* into one of the few US-made smash hits in Japan by localising the game itself for a Japanese audience. This time around that task has been handed to Konami.





Traveller's Tales has mixed familiar *Crash* elements such as TNT boxes, fruit, and jump boxes with a larger, more open 3D world. By focusing on established gameplay concepts, the developer is hoping to update the *Crash* franchise without leaving fans of the series disappointed





Battle Isle: Dark Space

Format: **PC**
Publisher: **Blue Byte**
Developer: **Palestar Inc**
Origin: **US**
Release: **Q1 2001**

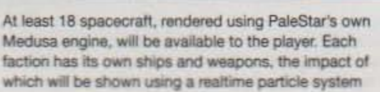
Palestar offers you the opportunity to shape the political future of the galaxy by scheming your way to the top in a multiplayer online-only title

An online-only title set in the strictly ordered Battle Isle universe ('about 103 years after the Andosia War', states Blue Byte), *Battle Isle: Dark Space* enables up to 200 players to simultaneously cruise deep space in an attempt to strategically outmanoeuvre each other.

Three warring factions – a trade federation originating from Earth, a band of rebels from the planet Chromos, and a pesky war-loving alien race – are struggling to gain control of the galaxy. The player begins as an ensign for one of the three, but through successful mission completion can move through the ranks and eventually assume control of capital ships. The initial choice of ship determines the role of the player, with scout ships, transports, and engineering ships amongst those available.

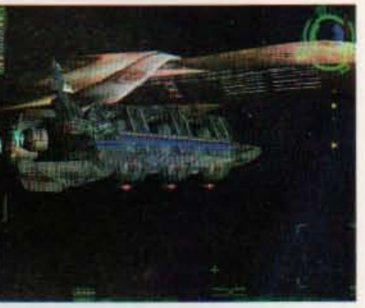
Achieving mission goals will also alter the political shape of the galaxy. With concerted player effort, the whole infrastructure can be changed, and though inter-player competition is to the fore, some random events will require player co-operation. Paying subscribers will also have access to a rankings system via Blue Byte's game channel, which will track their rank, kills, and campaign victories, something sure to increase deep-space competition.





At least 18 spacecraft, rendered using PaleStar's own Medusa engine, will be available to the player. Each faction has its own ships and weapons, the impact of which will be shown using a realtime particle system





Panzer Front

Format: **PlayStation**
Publisher: **JVC**
Developer: **Enterbrain**
Origin: **Japan**
Release: **Q2 2001**

Steer a batallion of tanks through World War II either siding with the good guys, or, more worryingly, defend Berlin against the advance of Churchill and the Russians







Adverse weather conditions and poor light will hamper your progress in *Panzer Front*, but not as effectively as a few well-placed bombs from a plane. The turret camera makes attacking enemies with precision possible, something far more difficult in the thirdperson view

Part action, part strategy, *Panzer Front* sees the player guide a battalion of tanks through World War II. Direct control is assumed over one vehicle, with the others following simple instructions issued via a simplistic menu-led interface. Most of the game is viewed in thirdperson mode, though a firstperson driver's perspective is available, as is a view from the turret which allows the player to easily and accurately target enemy installations.

During the game, the player will undertake missions as both Allied and Axis forces. Tasks are varied, and range from liberating towns to attacking trench positions. More specifically, Axis missions include defending Berlin against a final Russian assault, and evading the bombs of the RAF whilst trying repel the advances of Churchill's Sherman tanks.

Correct ordnance selection is key – the wrong shells will just bounce harmlessly off the enemy, and smoke shells need to be fired into the midst of battle to cover your troops. Artillery can also be called upon to precede an assault and soften up the enemy. Much of the scenery featured in the game is destructible, too, which, when combined with the real-world recoil and detonation effects, could make for satisfyingly explosive experience.

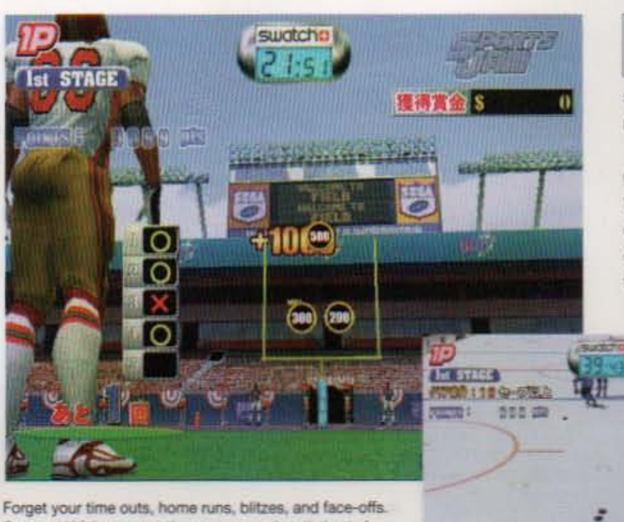
Sports JAM

Format: **Coin-op**
Publisher: **Sega**
Developer: **In-house (Wow Entertainment)**
Origin: **Japan**
Release: **December (Japan) TBC (UK)**

A colourful, playable, and patently US-targeted multi-sports avalanche from the first title to utilise the latest Sega coin-op technology, unveiled at the autumn TGS







Forget your time outs, home runs, blitzes, and face-offs. *Sports JAM* throws out the strategy and statistics in favour of quick-hitting and addictive arcade action. The nature of the sports on offer should appeal primarily to US gamers, though expect the pick-up-and-play game dynamics to eventually win over a far broader, international audience

Unquestionably geared towards the market on the other side of the Atlantic, *Sports JAM* is the first title to exploit the financial benefits of the new Naomi GD-ROM board (which stores the data on a DC-like disc, hence proving much cheaper to manufacture), first shown at the recent JAMMA show (see **E**91).

Eight sports are included (baseball, basketball, ice hockey, golf, tennis, cycling, American football, and proper football), and the general idea is to become the King of Sports by mastering the different activities. These are spread around the game's 12 levels, which essentially come across as minigames set up to test your accuracy, and the simple two-button controls promote the title's accessibility. To win, you must clear just four stages – you're free to choose the first three from the 12 available, but the fourth must be one from the originally selected trio with a view to establishing a record score for that particular round.

The most addictive element of the game is likely to be its twoplayer option, with whoever acquires two wins first being declared champion. Should both participants manage a win each, then the victor is decided via a sudden death round. Convert it to Dreamcast and the stage is set for massive multiplaying potential.

F355 Challenge 2

Format: **Coin-op**
Publisher: **Sega**
Developer: **In-house**
Origin: **Japan**
Release: **Out now (Japan)**

The master of the schizophrenic world occupied by the arcade driving sim returns with a new coat of paint, but predictably little mechanical tinkering

In the arcade, *F355 Challenge* is astoundingly captivating material. There's none of the understeer experienced by the time the game made the transition to a GD-ROM (itself most likely the result of control peripheral change), and the experience rarely disappoints.

A sequel was predictability itself (despite the obvious cabinet costs and reportedly low profitability margin). Interestingly, owners of the DC version of the original will already have learned the intricacies of the five additional tracks on offer here. Fiorano (one of Ferrari's test tracks), Laguna Seca, Sepang, the Nürburgring, and Atlanta all feature as home extras on the Dreamcast's *F355 Challenge* conversion.

More important, perhaps, are the announced tweaks to the AI, which while very impressive, isn't the best or most consistent **Edge** has encountered. And as ever, better CPU behaviour would definitely further improve the virtual racing affair.

Admittedly, this is an *F355* respray rather than a genuine rebuild, but the additional circuits and minor overall improvements may tempt those who found the original too intimidating. But if not, at least those prepared to take on Yu Suzuki's masterly creation are not likely to have to queue.



Owners of DC *F355 Challenge* will recognise these corners, which are part of the five extra tracks that made it into the home version. A straight DC port of this revamped coin-op is hence unlikely, unless Yu Suzuki and co decide to implement a new selection of goodies









Desperados

In the heart of the German countryside a developer is hard at work recreating the roughhouse world of the wild west for strategy-loving PC owners everywhere. Edge moseyed over to see how it was doing, and uncovered a title that has the potential to take on all-comers in the genre

Offenberg is a strange place to discover a game inspired by the edgy standoffs and cigarillo smoking popularised by the spaghetti western. It lies just a few miles east of the French border, and those wishing to make the journey out here must first fly into French-owned Strasbourg before boarding a coach. A still silence hovers over the quaint cobbled streets – but it is more 'Chitty Chitty Bang Bang' than Dodge City. You half expect the Children Smeller to emerge from some pink-painted doorway toting lollipops. It couldn't be more incongruous.

Spellbound, too, is making a departure from familiar territory. The German developer is little known outside its native borders, but its 1996 title *Perry Rhodan – Operation Eastside* tapped into a peculiar and lucrative market. Germany, Austria, and Switzerland went absolutely crazy for the eastern bloc's most famous sci-fi hero. With *Desperados*, however, the company hopes to go global with a theme instantly familiar to anyone with access to a TV or a cinema.

Western sensibilities

"We have not tried to steal directly from movies," explains **Jean-Marc Haessig**, Spellbound's creative director. "But we do focus on very typical moments from westerns."





The characters, who each have five completely different skills, are *Desperados'* real strength. This results in frantic mouse clicking when all hell breaks loose

He later makes reference to 'Maverick', 'My Name Is Nobody', and the Sergio Leone pantheon. Indeed, at the small development studio, which houses just 18 coders, posters of some of the more famous movies litter the walls. 'Le Bon, la Brute, et le Truand' and 'I Magnifici Sette' need no introduction in any language. These legends in the genre clearly serve as focus, inspiration, and source material for what is the first ever strategy game based in the wild west.

"The game takes place in El Paso on the Mexican border," outlines the game's producer, **Ralph Adam**.

Format: **PC**
Publisher: **Infogrames**
Developer: **Spellbound**
Release: **February 2001**
Origin: **Germany**

















Michael Bach
senior product manager, Infogrames



Jean-Marc Haessig
creative director, Spellbound

"There's a railroad company called Twinnings, and they are fed up with their trains being robbed all the time. This mysterious stranger comes to town who is our hero, John Cooper. A classic hero in the Clint Eastwood mould. He goes straight into Twinnings and says, 'Okay, I will get those robbers'. This is where the player enters the game."

Perhaps because of the untapped potential of this genre in videogames, Spellbound is sticking to all the familiar tropes: steamboat gambling, hangings in the public square, jailbreaks, saloon fistfights, train robberies, and explosions at the local gold mine will all appear throughout the course of the game. During its 25 missions *Desperados* threatens to explore just about every western cliché you care to remember. But this is a strength, not a weakness. "When you come across the Superbeal race on Suvervelious 5 in a sci-fi game, so much has to first be explained to the player," notes **Michael Bach**, senior product manager. "We wanted to have a straight action game. When we first started thinking about a background we went through all the usual options – World War II, sci-fi, fantasy. We thought, let's make a break, and one day 'A Fistful Of Dollars' came on the TV."






Though the scenery is static, it is clear that a great deal of love and attention has gone into creating the game world. Each level creates a completely different environment and objective

Down the barrel of a gun

Despite this 'break', there are many similarities between *Desperados* and *Commandos*, but the team points out many features which make its game unique. The first thing to note is the sophisticated line-of-sight capability which has been implemented into the game. "Each character, no matter if he is a civilian or an opponent, has a line of sight,' reveals Adam. "It is a bit different to other systems used in *Commandos* or *Metal Gear Solid* because it works in three dimensions. It even extends to rooftops. This game always shows you who is spotting you, why he is spotting you, and where he is standing."

Some 30 different enemy types are included in the game, ranging from Mexican henchmen to El Diablo himself – the villain at the centre of the corruption in the game. Not only is this a good deal more than the variety of adversaries found in *Commandos*, but every single character in El Paso has his or her unique 'personality'. Haessig elucidates: "One major point of the AI is that it is not something which has been developed in a few months. It started from the beginning and it is very important to the game. Each person has ten different attitudes, going from laziness to sense of duty and through to courage. Do they react to sex appeal? Things like that. The AI takes into account all these attitudes and checks them. It means that the game is not scripted."

"Some of the opponents may always be looking for women," interjects Adam. "The Mexican guys can be carrying tequila bottles and drinking. We tried to make it obvious to the player who is clever and who is stupid. We also have a stamina level for each character, so if he runs around a building after you three times he will stop every five metres because

Perhaps because of the untapped potential of this genre in videogames, Spellbound is sticking to all the familiar tropes: steamboat gambling, hangings in the public square, jail breaks, saloon fistfights, train robberies, and explosions at the local gold mine all appear





The larger buildings such as this saloon (above) lose the roof when your character enters. The Mississippi steamboat (above right) was inspired by Mel Gibson's shenanigans in 'Maverick'














he is out of breath."

In practice, these elements work convincingly. Many of the levels in *Desperados* are complete, and most of the remaining work is mere fine tuning – a laudable position to be in for a game which could easily have been rushed out for Christmas in its present state. A demonstration proves the point. The main character, Cooper, is led along a mountain trail to confront a bandit. Cooper comes within the bandit's line of sight and the enemy clearly shows signs of indecision. Eventually he decides to turn tail and run for cover. "If a coward runs away to find friends and they are not there he will stand and think what to do next," adds Haessig. "Another time he might actually find his friends and return, so every game is different."

Keeping your cool

Desperados is already shaping up to be incredibly playable. There are a few question marks over the interface, which can be fiddly – especially during frantic shootouts – but this is a criticism which can be levelled at most point-and-click strategy titles. Each of the four main playable characters has five completely different special abilities, which further serve to define their personality. Yet trying to control each when the bullets start to fly overhead can be demanding. The comprehensive icon system is both a burden and a boon.

Desperados' key advantages over the competition lie in giving the player a great deal of choice in how they accomplish a given objective. The Desperado posse is made up of John Cooper (marksman and bounty hunter), Kate O'Hara (professional gambler), Sam Williams (expert in explosives), and Doc McCoy (doctor and locksmith). Each has their individual charms, and bring more options to the game when they are recruited. Want to distract a sentry? Then you have several choices. O'Hara can use her femininity by revealing a gartered leg, or Cooper could open his melody-playing pocket watch to attract attention.

It is vital that the player takes a close look at the surroundings before putting together a strategy. Secreting fallen foes, for instance, becomes crucial as enemies will react if you do not cover your tracks. "Picking up bodies is a special feature that only Cooper has," adds Adam. "Each character has particular skills, and in the later levels you really need to combine them. In some scenarios you are not allowed to kill anybody at all. In each level I promise you that you won't get through the level if you don't use the special features of every different character."

To help with manipulating the manifold commands, a macro function has been included. "It is a feature that no other game in this genre has," enthuses Adam. "You can program one command for each character, and if you click on a button they all follow their commands in a synchronised order. When you eventually get six characters this can be very useful. Cooper jumps through a window while Doc sneaks around the back. If then there are two enemies, you can program to throw the knife at one of them then run over to the other and cut his throat. So as soon as you have fulfilled one order, the other can be directly executed. This gives you more strategic depth."



This Pueblo village is one of the more impressive backdrops to the game. The structures have been built into the cliff face, and require the team to scale ever higher buildings to reach their goal

Poker-faced developer

Although early levels are revealed, the team clearly wants to keep some things under wraps. "The first six levels ease the player into the game," explains Bach. "It acts as a kind of tutorial, but we don't want to say too much about what how the plot develops after this. There are only four playable characters on the first six levels. Later on Sanchez, a Mexican, will join the team, and later Mia, who has this monkey – Mr Leone – and uses it as a special feature. So she can control the monkey with peanuts."

The setting makes *Desperados* a very interesting proposition. The German developer is so enthusiastic about its title that talk of a sequel is already in the air. "We are thinking about X-Box and PlayStation2," reveals **Armin Gessert**, Spellbound's MD. "*Desperados 2* will definitely be multiformat. We want to bring it to as many platforms as possible and there might even be a Game Boy Advance *Desperados*." **Edge** suspects that a powerful bandwagon is about to hit the trail, but it looks like one which is well worth jumping on.



Armin Gessert
managing director, Spellbound



Ralph Adam
producer, Infogrames



The game begins in the sedate village of El Paso. Cooper is given a short tutorial by an old man who sets him tasks such as throwing knives at targets and getting involved in fistfights





Phantasy Star Online

Sonic Team has extremely high hopes for its fourplayer online RPG. Should everything go according to plan, it will be the first of its kind on any console, it will feature a groundbreaking dynamic translation system, and it will save Dreamcast. Edge talks to the man in the hotseat

Yuji **Naka** is a busy man. Given his position as the CEO of Sonic Team, that's hardly surprising, especially in a month where his company puts the finishing touches to its most ambitious project to date. Not that he's not having fun; he's just replaced his Porsche with a Lotus Elise, complete with racing trim and lessons from a famous Japanese GT driver. But he's busy, he's tired, and he's nervous, and it comes across in everything he says.

Naka-san on the problems of coding a solution to dynamic translation: "We're still working on the word select method. Spanish and French, where there are male or female words with so many rules... it's a nightmare for us. Last month we had to redesign the whole system."

On the pressure of sales expectations: "One million. I mean, I'd like *PSO* to sell a million... but who knows. I know the US will be our main market, and feedback so far is great."

And on the future: "Well, we'll release *Samba 2000*, *PSO*, and, next year, *Sonic Adventure 2*. And then a rest? No, we just start to ask what's next. I think we're going to decide our next move in the near future, but building *PSO* has been such hard work. I'm constantly moving, to San Francisco, to London... it's a lot of travel, a lot of time"



Juggling jobs

It isn't easy to juggle the roles of company CEO and creative leader, and doing so brings with it a working life with much inner conflict over value and aesthetics. Right now, though, Naka-san's mind is on *Phantasy Star Online* the game, not *Phantasy Star Online* the product – and if he's nervous, it's because it's not long until it launches. Soon after that he'll find out if his team's attempt to bring the world online to play it has succeeded, but not immediately, since contrary to his wishes the game will not be receiving a simultaneous global release. Worldwide marketing plans have seen an end to that, a massive disappointment given that one of the game's strengths is the stress on multinational co-operation.

When **Edge** meets Naka-san at Sega's European HQ in Gunnersbury, London, the multiplayer aspect isn't the only asset he's anxious to play up. *PSO* looks stunning: this is a game that pushes right at the limits of the Dreamcast, perhaps even more so than Yu Suzuki's gorgeous *Shenmue*.

Format: **Dreamcast**
Publisher: **Sega**
Developer: **In-house (Sonic Team)**
Release: **December 21 (Japan) TBC (UK)**
Origin: **Japan**

Photography: **Hiroki Izumi**

"One million. I mean, I'd like *Phantasy Star Online* to sell a million... but who knows. I know the US will be our main market, and – for the moment – feedback is great. We'll release *Samba 2000*, *PSO*, and, next year, *Sonic Adventure 2*. Then we just start to ask what's next"



Virtua you

An excellent character creation option before you embark on your journey enables you to comprehensively alter your virtual self's physical image. For instance, if you don't like your character's body shape – you find him/her annoyingly tall and slim, for instance – why not superdeform them by squashing them up? That's assuming you're happy with the rest of their attributes, of course – hair colour/style, skin tone, clothes, etc. The potential is there to create your own distinctive *PSO* persona, which in a game like this is a crucial aspect of the proceedings.

It's also something the head of Sonic Team believes could only be achieved this successfully on Sega's machine: "It's very difficult... I mean, *Phantasy Star* in this form would never run on any other system, not even the PC. Well, maybe with the newest Voodoo board – not perfectly, but it would work. We put a lot of time into this project, and we're constantly playing with the vertical sync, so it might not work on the PC at all. You couldn't do it on the newest console – Sony's. Maybe on an X-Box or GameCube."

At one point in the interview, Naka-san points at the cover of **E**90 and picks out the GameCube as the one machine he'd like to develop on. Even so, he's still reluctant to consider multiplatform gaming as the obvious next step towards unifying gamers.

"It might be a marketing advantage to break the hardware barrier, but I don't see any merit in that," he says. "To develop a game across several platforms you have to base your development on one piece of hardware and then move on to the next, which would mean focusing on the weakest. So, if you want to make a game running on both Dreamcast and PS2, you'll never get something looking like *Phantasy Star Online*. The project would become a very cheap-looking game, and I don't want that."







Anyone familiar with the previous *Phantasy Star* games is likely to be astounded by the leap in visual quality for this sequel. In a perfect world, *PSO* would revitalise Sega's current problematic position while further establishing DC as a viable platform option for gamers looking for innovation

The importance of *PSO*

The artistic vision shines through, but it's also clear that, if there is to be a longterm future for Dreamcast, much of Sega's hope for that future rests on *PSO*. So it's crucial that it remains an exclusive title, though Naka-san does concede there is one way you could see *PSO* running on a different platform – the PC.

"One thing has just been revealed that's particularly interesting. The Dreamcast now exists as a single chip, and Sega's speaking with PC makers so the chip will be included inside the PC. There could be a special button called 'game' beside the ones for Internet or email that are now common on keyboards. Pressing it will run the Dreamcast immediately, and start the game working. It'll open the DC to a far wider audience."

"It might be a marketing advantage to break the hardware barrier, but I don't see any merit in that. If you want to make a game running on both Dreamcast and PS2, you'll never get anything looking like *PSO*. The project would become a very cheap-looking game"





Go online once the game's released and you may come across a Naka-san controlled character. *PSO*'s creator has a habit of playing against the game-buying public and regularly plays *Chu Chu Rocket* on the Net



Progression pauses momentarily if team members discuss tactics, or they regroup and catch their virtual breath after a particularly demanding battle, but otherwise it's smooth stuff

Structurally, *PSO* differs from traditional RPGs. The most obvious way is that it has levels – in a traditional *Sonic* sense, not the D&D method of raising your characters stats – and each has a relatively linear structure with a very definite end, often guarded by a boss. Naka-san demonstrates how one might work by running a small test level, created recently for demonstration purposes. It takes the form of a heavily guarded path that slices through a bright, vibrant jungle. The power-up-laden journey along it leads to a portal, which in turn leads to a deep underground cavern and a battle against a massive dragon.

"You know, the game's not that big," he says. "Of course, there is a







Unlike traditional RPGs, *PSO* is split up into levels rather than offering a continuously expanding gaming world, apparently a direct result of the emphasis on online multiplay – the game's essence, after all



Levels have a definite linear structure with the end section more often than not guarded by a boss. Once it's dealt with the party moves on to another level, with new visuals to match

central story, but you've got to consider it like an old game, *Wizardry*. There's one dungeon, and people enjoy it in a multiplayer way. It's not a standard RPG, so it can't be compared in a standard way."

A short intercontinental telephone call sees three of his Tokyo-based team log in to the gameworld and appear in front of **Edge**. "Hello from Sonic Team Japan!" appears in a speech bubble one of them, then – after a brief moment of tactical consideration – the team heads off along the winding pathway. Visually, it's clearly a world away from the browns and greys so prevalent in the genre; dynamically, it's a sugar-rush dash through a sci-fi garden, punctuated by pauses where the team decides to change its tactics and rest before forging on.

Translation troubles

While his colleagues dash around the screen hacking at the dragon's legs (occasionally suspending attacks to send brief comical messages of greeting to each other), Naka-san explains how Sonic Team has set about conquering the problem of dynamic translation.

"I'm still working hard on it. You can't imagine. I've been thinking of the communication system for more than five years now. I really wanted to design something that allowed people from all over the world to communicate together, but there were many points I didn't know how to handle. I spent so much time on paper trying to find a way, and eventually, I understood I had to start with words, and from that came the symbol chat system.



"You know, the game's not that big. Of course, there is a central story, but you've got to consider it like an old game, *Wizardry*. There's one dungeon, and people enjoy it in a multiplayer way. It's not a standard RPG, so it can't be compared in a standard way"



PSO's world is astounding. Though very different in nature, **Edge** would go as far as saying Naka-san's title can surpass fellow Sega man Yu Suzuki and his team's outstanding efforts in *Shenmue*

"It's based on icons. For example, one would look like coffee, and that would mean let's have a break. There'll be a large number of these icons, each with a meaning understandable by people all around the world. I still don't know if I'll be able to put it in the final version – it may be dropped at the last minute.

"In total, there are four chat systems in development: keyboard input, software keyboard input, word select, and icon chat. The idea is that the user will be able to decide which suits them best."

When using the word select system, the player chooses from one of many predefined expressions grouped into broader categories. The expression then appears on fellow players' screens, translated into whichever of the five languages they have chosen as their native tongue. The game is multilingual, so the players don't have to be, and not having to worry about communication means a more immersive experience.

Something else key to involving the player in the game is making them care about the character they play as. In this case, it means limiting the amount of personalities the player can inhabit – as Naka-san puts it: "It's simple. One VMS, one character." The character configuration screen makes the reason for the decision is apparent. Once the player has chosen a character type, they must clothe them, and alter the hairstyle, skin tone, and facial model. Finally, a simple crosshair lets them stretch the model into utterly disparate body shapes. Short and fat, tall and thin – identity is a vital element of online gaming, and if the player is forced to consider what identity they are to assume, then the assumption is that their character will



The latest shots to come out of SOJ centre on a futuristic megapolis, though past images have been more rural-influenced





become so much more important to them when they're actually playing.

More than four?

So, given the success of online PC RPGs like *Ultima Online* and *Everquest*, wasn't Sonic Team ever tempted to give players the opportunity to take their characters into a massively multiplayer world?

"Considering Dreamcast capacity and the server you'd need to support a massively multiplayer game, no. Don't forget we first intended to release the game in March. To put in place servers able to support so many users from all around the world would take two years, just for this technical issue. So we decided to stay on a lower scale. I'd have liked six more months to finish the game – when you're close to the end of development, you want to add more and more features.

"You can't write to the GD-ROM, and there's no hard disk in the DC, so it's very difficult to store the data needed for an MMORPG. We're gaining experience through the *PSO* beta test, and already we're finding it a challenge to even consider a larger scale. I guess it'll be possible on the PS2 or X-Box, though, using the hard disk, but it'll be incredible difficult for them. Even if they start right now, a release could only come in two years at best. We don't even know if PS2 will still be around then."

It's not just about technical and time constraints, either. Naka-san sees other, more artistic dilemmas with developing multiplayer RPGs for machines with rewritable media: "If you look at what's happening with games like *Ultima Online* or *Everquest*, they're continuously updated via patches. The companies which make them are always working to update their product, and aren't able to come up with something greater or new. If Sonic Team had to do the same with *PSO* for ten years, is that interesting? I think releasing a new game would be better – not spending all the time in the same world, but creating



Traditionalists may balk at the lack of staple RPG components in this scene, but giant dragons make significant appearances elsewhere



something totally new seems like a far better option to me."

Having said that, Naka-san doesn't rule out the possibility of taking the game further at some point in the future: "It's possible that *PSO* will become a series, but developing this title alone has already consumed all our time and energy. However, when we release it, I think many of us in Sonic Team will begin to think how great it would have been to include this feature or that one, and so on. So, we might need a sequel after all."

The communication system currently offers four options – keyboard and software keyboard inputs, word select and icon chat – and the idea is for *PSO* players to opt for the one they find preferable

Finishing the job

Thoughts of such an undertaking have to be put to the back of the team's minds for now, because they have more pressing deadlines to meet. They won't rest easy until *PSO* is on the shelves, but when it is, Naka-san will do what he hopes the rest of the Dreamcast faithful will do. He'll go online and he'll play the game.

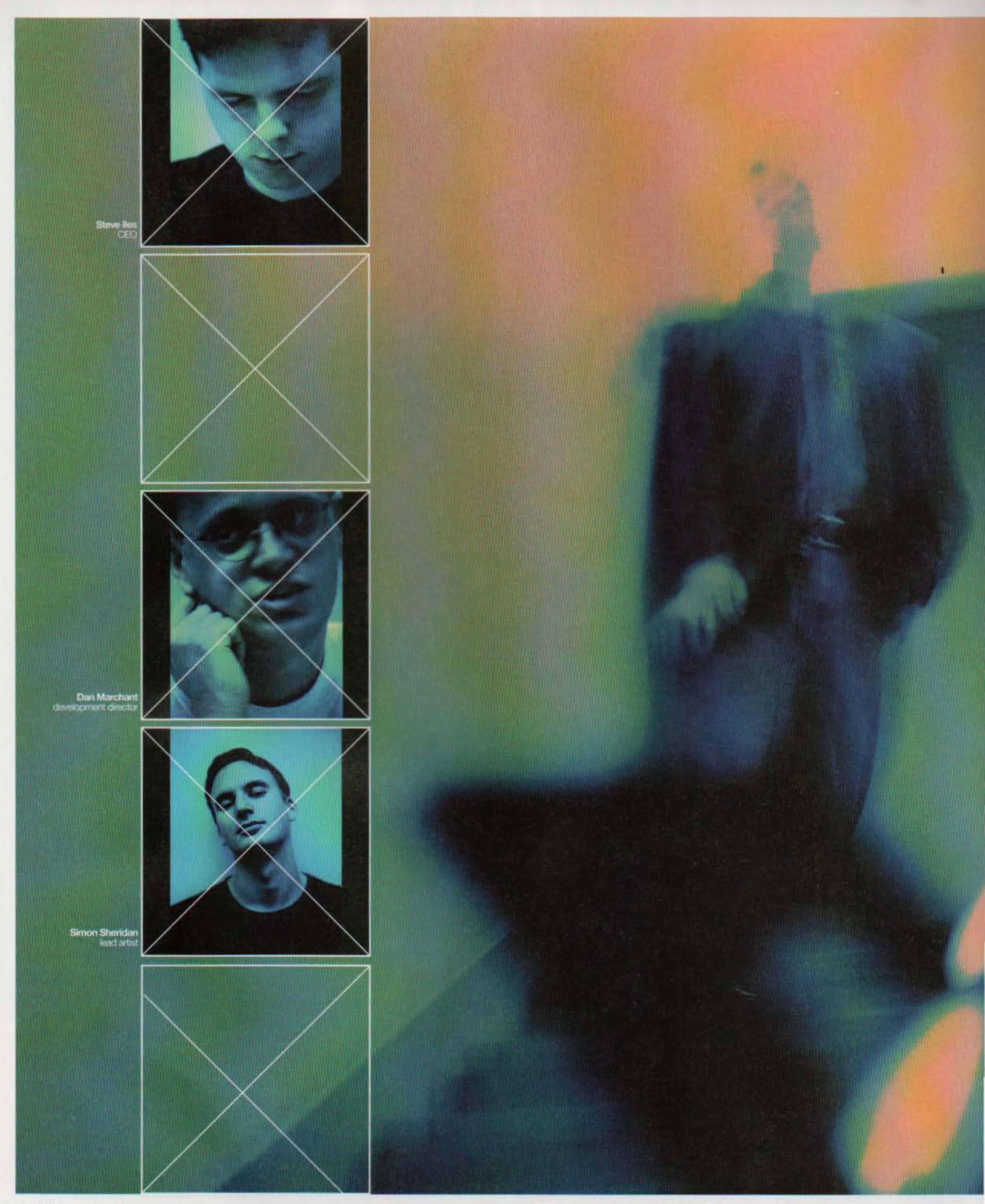
"Oh, yes, I really think I'll play it online. I still don't know if I'll introduce a special character. Mmm... I've not finalised that yet. Anyway, I'll play it after the launch in the same way as everyone else. I already play *Chu Chu Rocket* a lot – it's my greatest pleasure to play with others online. With *PSO*, I'm looking forward to using it to talk with overseas users."

Thanks to business models, financial deliberations, and the considered decisions of the marketing men, he's going to have to wait a little longer. Soon enough, though, Naka-san will be able to find out if his creation will bring gamers together in the way that he hopes. Whatever, one thing is certain: Sonic Team has put everything into this, expectations of success are huge, and those expectations weigh heavy on its leader. As Yuji Naka, CEO of Sonic Team, he wants his division's newest product to be a commercial success. As Yuji Naka, gamer and designer, he wants the game he's passionate about to be loved by others, too. And that's where the nerves come in.

"I've spent what feels like an infinite length of time thinking 'What is the Dreamcast?', really searched inside the machine to see what it was meant to be. *Phantasy Star Online* was the clear answer. It's the killer application of a machine that is fundamentally based on its modem. I really hope people will understand and enjoy it, as it should be." **Edge** hopes they will as well.



Marketing men got in the way of a global *PSO* release – frustrating when the multilingual perspective has been central to the development. You'll now have to wait until next year to find out whether it works


Steve Iles
CEO
Dan Marchant
development director
Simon Sheridan
lead artist


Robert Swan
artist

Ray Jakes
programmer

Dominic Berzins
associate producer

Photography: Martin Thompson

Inside…

Pocket Studios

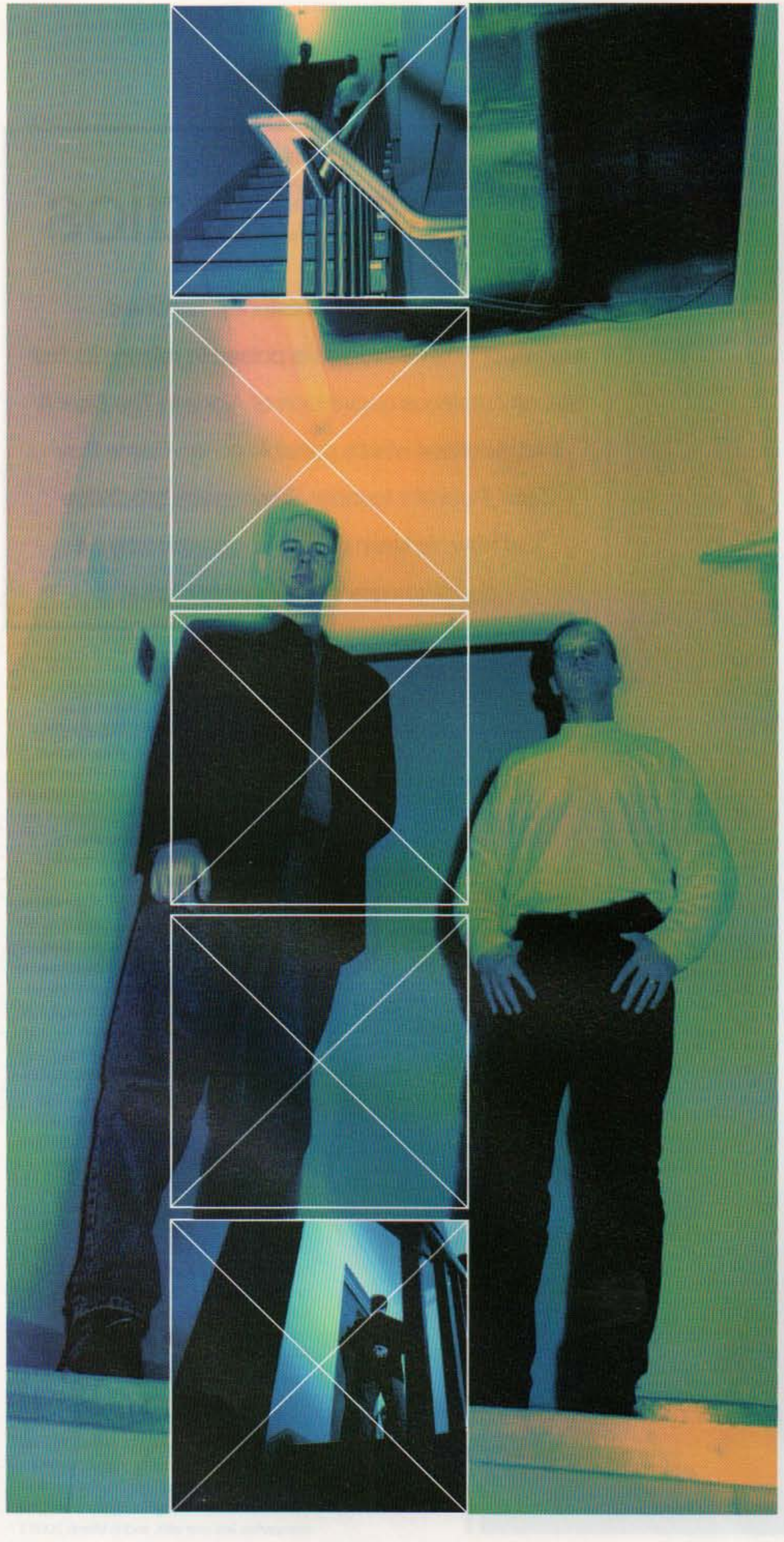
After just a year in existence, handheld developer Pocket Studios is poised to release its first title, an ambitious conversion of *Alone In The Dark IV* that redefines what's possible on the Game Boy Color. Pocket's founder Stephen Iles tells Edge just how his team did it and explains why he chose to enter the handheld market

If nothing else, Pocket Studios is aptly named. Six people working out of two rooms hardly seems to qualify as a single studio, let alone as a collection of them, and yet the year-old, Beckenham-based start-up has no less than four titles in development. And that's where the first half of the company's name comes in, as Pocket Studios is the latest operation to specialise in the relatively unglamorous field of handheld console development.

For Pocket Studios' founder, **Stephen Iles**, the decision to go handheld was based on his own take on the videogame industry. Reasoning that the quickest way into development was to create tools and technology demos to attract commissions from publishers, he surveyed the possible platforms: "PC? Tons of money, might get you nowhere. PlayStation? Coming towards the end of its life with PlayStation2 kicking in so by the time I develop any technology, it'll be wasted money. Okay, handhelds. Game Boy. Quick turnaround, good profit margin, you can still do great games if you push the system hard enough – that's where I'll develop my technology."

That technology ran to Colour Game Boy demos of a shoot 'em up engine, a top-down racing engine, a platform engine and further demos exploiting the Nintendo console's little-used HiColour mode. All the demos were created by Pocket's lead programmer, Richard Brough, who worked on the inventive GBC translation of Rare's *Perfect Dark*, and they proved key to Pocket's evolution.

"Last November, I had enough technology to go out and start pitching to publishers," adds Iles, "and everywhere I went, everyone I met said, 'This is the best stuff we've seen on the Game Boy Color'." Infogrames was among the companies Iles met with, and in March 2000 it



gave Pocket its first contract – to develop a Game Boy Color conversion of *Alone In The Dark IV*.

Making an effort on Game Boy

The path from high-end machine to low-spec handheld is a well-travelled one, with sparkling, sophisticated 3D epics effortlessly becoming mundane platformers or lacklustre top-down mazes along the way. According to Pocket, that emphasis has too often been on 'effortless', as development director **Dan Marchant** explains: "One of Steve's original aims was that the Game Boy wasn't going to be treated like a zero-effort platform, which it is for a lot of publishers and developers.

"With *Alone In The Dark*, it certainly wasn't a zero-effort title," he continues. "There have been 11 people working on it, which is a rather excessive team for the Game Boy." The reason for all that extra manpower – GB titles typically require little more than a programmer and an artist – is the same reason Infogrames chose Pocket to undertake the conversion. Put simply, *Alone In The Dark IV* is one the best-looking Game Boy titles there's ever been.

It all goes back to Iles putting his faith in technology, as Brough managed to square a circle and figured out a way to use the CGB's HiColour mode for in-game graphics rather than just for presentation screens. The result is a game that looks uncannily like its big box brothers – no surprise, given that Pocket has used the original PC background graphics converted to the lower resolution and 2,000-plus colours of the Game Boy Color.

On top of these HiColour backgrounds struts a large sprite of regular *Alone* hero, Edward Carnby, which scales as he navigates the signature expressionist camera angles used in the Infogrames' series. But the impersonation only goes so far. "It's replicating the environment," says Marchant, "but all the puzzles, the game design, and the storyline itself are original." Cartridge size constraints and the complex layout of some locations, forced Pocket to create its own original game from around 240 of the scenes taken from the PC version.

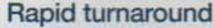
The limitations imposed by combining HiColour backgrounds and Carnby's scaling sprite caused another headache. "We originally designed the engine to have fighting take place within the environments," says Marchant. "The trouble was, there were major problems if you and the creature ran to the front of the screen because there weren't enough sprites to do this." The solution is less aesthetically pleasing, but a lot more practical, with action switching to one of five simple, sprite-based combat arenas whenever Carnby gets into a fight.

Alone In The Dark is shaping up to be an impressive debut for Pocket when it appears next spring, by which time work will be well underway on two more CGB titles – *The Mask*



and *Super Dropzone* – together with the company's first Game Boy Advance effort, *Lego Racers II*. Nearly every surface at Pocket is currently covered in various Lego models as the team work on the Mode 7-style circuit racer. Comparisons with *Mario Kart* will, Iles accepts, be inevitable – especially given the derivative nature of the first *Lego Racers* – and he's at pains to stress that this is something Pocket Studios will fight against in its design.

Working on Game Boy Advance has posed another challenge for the company. "A lot of the work we've done on GBC may be becoming redundant," concedes Iles. "We now have to start from scratch and do it all again, creating PC-based tools for Advance. If I assume that GBA will have a five-year lifespan, then we have to have technology on every front – platformers, shoot 'em ups, racers – in place within 12 months."



Rapid turnaround

That kind of rapid turnaround is one of the benefits of working in the handheld market and for Marchant there are many more: "The shorter development cycle forces you to focus and make decisions. I've spent 13 years making games, and it's very hard to get people to make a decision until two weeks after they're supposed to make it." With a GBA title taking only around 10-14 months from start to finish, Iles contends it's better for staff morale too: "Before the guys can get bored, they're on another project."

Small isn't entirely beautiful, however, and Pocket has to live with more than just technical constraints, as Iles explains: "All the publishers we've been to, and the general banter in the industry, is that unless it's got an intellectual property on it, they can't sell it." Marshall interjects: "We're not fighting against them, we're going to take their power and use it against them – the old judo technique."

Then there's the *Pokémon* factor. All the wide-eyed children won over to the Game Boy by the all-conquering franchise have been great news for Nintendo, but Iles has found many publishers unwilling to take on a market dominated by Pikachu et al. "It's a different market," concludes Iles, "but in many areas it's the same, still operating in the interactive entertainment industry."





The longterm future of that market, and of Pocket itself, will no doubt depend on the Game Boy Advance, and Iles, along with most publishers, has been waiting for Nintendo to announce its official business model. "That's held back a lot of publishers' decisions," he explains, "as they've not known what their margin is so they don't know where their profit's going to come from." But Iles is also looking beyond Nintendo, at other handheld formats such as WAP and PDAs. And he's looking beyond Pocket, too: "Pocket Studios will specifically concentrate on handheld but there will be another company created for doing other formats."

Pocket-sized studios, somewhat bigger plans.











The Game Boy Color half-brights colours, so the original PC backgrounds had to be boosted for the Pocket Studios *Alone In The Dark* conversion





As well as developing *Alone In The Dark IV*, Pocket Studios has lined up work converting *Super Dropzone* (left), and *The Mask* (right), and its debut Game Boy Advance title, *Lego Racers II*

Generation Y

Net Yaroze – the PlayStation dev kit Sony offered to the public – provided many of its owners with the means and inspiration to enter the game industry. **Edge** talks to some of them, and reflects upon a groundbreaking experiment which may never be repeated

Back in January 1997, **E**41 reported 'a development with the potential to change the face of videogaming forever'. In retrospect, Ken Kutaragi's brainchild, the Net Yaroze, may not have matched such grandiose expectations, but by inspiring a new generation of bedroom coders to enter the videogame industry, the unit – essentially a cut-down PlayStation development kit – may yet reward the faith of the company behind it. Veterans of the Yaroze scene now occupy positions with developers ranging from Codemasters and Reflections, to SCEE itself. The sense of community that grew up around the device, deliberately fostered by Sony, was a key factor for these individuals, who organised regular gatherings to socialise and share ideas since the unit's inception. **Edge** attended a recent event in order to discuss Sony's unprecedented foray into home programming with several of those who were spurred on to pursue professions designing and coding videogames through owning and using a Net Yaroze.

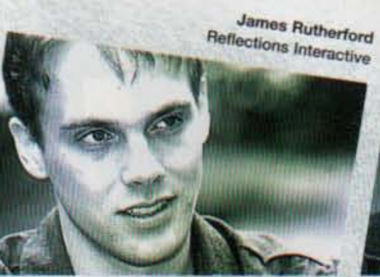
When it launched, £550 paid for a modified black PlayStation, a serial cable to connect to a PC or Mac, a C compiler, PlayStation development libraries, examples of code, and, perhaps most importantly, access to a members-only Web site supported by Sony. The kit was limited by the fact that streaming video or data from CD wasn't supported, and only fellow Yaroze owners were able to play games developed on the machine. However, the inclusion of the best examples of code on *Official PlayStation Magazine*'s cover disc provided non-members with a chance to try the titles, and members with a huge incentive to produce serviceable games.

There is no doubt that many of those that bought into the Yaroze phenomenon would have been been just as well served with a C textbook, but for those with the basic programming skills or the dedication, the device proved to be an enormous stimulus. "When the price dropped the second time, there seemed to be an influx of people to whom 'programming capability' seemed like a nice add-on to an all-region PlayStation," points out **James Rutherford**, currently working on *Stuntman* at Reflections. "I think a few found themselves quite out of their depth – in fact, throughout the project, many of the allocated Yaroze members didn't ever make an appearance on the Net, so maybe many were in that position." Indeed, despite his own

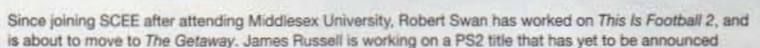


Photography: Jude Edginton





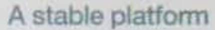



Since joining SCEE after attending Middlesex University, Robert Swan has worked on *This Is Football 2*, and is about to move to *The Getaway*. James Russell is working on a PS2 title that has yet to be announced

After completing an AI and Psychology degree in Edinburgh (where he met up with Nick Ferguson), James Rutherford joined the *Stuntman* team at Reflections. George Bain is another key member of the Yaroze scene

"I didn't know much about programming, but I taught myself C... It's a myth that you have to be a super-genius to be a programmer – the basics are easy enough to pick up, and you'll soon realise that anything is possible with perseverance"

rudimentary knowledge of programming, he himself found it hard going at times: "I was a bit discouraged at first – there's quite a steep learning curve in terms of tools and getting used to the documentation." **Nick Ferguson**, who went on to work at Creature Labs and Rare, didn't have the safety net of background knowledge, but nevertheless found the Yaroze useful. "I didn't know much about programming, but I taught myself C from a couple of books and within six months I had written my first decent game. It's a myth that you have to be a super-genius to be a programmer – the basics are easy enough to pick up, and you'll soon realise anything is possible with perseverance."



A stable platform

The advantages of learning to develop games on the Yaroze, for both veteran and novice, were numerous. The most obvious was that it was a stable platform designed specifically with games in mind. There was no convoluted *Windows* API, and there were no moving targets, as **James Shaughnessy**, currently a game design programmer with Codemasters, points out: "There is a fixed CPU speed, a fixed amount of memory, and a standard controller type, which means for one thing you know that what you see when your game runs is what everyone else will see. It also removes a load of problems you face with the PC, such as compatibility, and the lack of standard controllers, graphics and sound cards, and CPU speeds."

Another was that Sony engineers were available, at least initially, to help out the Yaroze community. The most significant benefit of the scheme, though, was the help and example of other members of the community. "In the early days the SCEE engineers who lurked on the newsgroups were pretty invaluable," agrees Ferguson. "As the project went on, a real body of knowledge built up (on members' sites, the newsgroups, various FAQs) and Sony's presence seemed to dwindle. Net Yaroze was the community, in my mind. Those people who bought the machine, fiddled with it and lurked on the newsgroups without ever contributing or asking questions were not real members." By contrast **Robert Swan**, who has just finished working on *This Is Football 2*, and is preparing to help out with the graphics in *The Getaway*, was very much a committed member: "I tried to help on the newsgroups when I could – even if it was sometimes a case of the blind leading the blind. Sometimes it's just helpful to know you're not banging your head against a brick wall on your own, which is why the Yaroze community worked pretty well. It's never nice to work in a vacuum, and seeing other people making progress was sometimes all that was required." Summing it up, he says: "The setup meant development wasn't as quick as on a PC, and the number of resources were dwarfed completely by huge availability of PC source, but it offered what turned out to me to be worth more – the knowledge that real support was available if required."

Community support

While the Yaroze community may have appeared intimidating to outsiders, or indeed reticent newcomers, the exclusivity of the club also worked in the device's favour. "The fact you had to pay to work on the Yaroze eliminated a lot of the dross you get in any Web community that are there to spoil the atmosphere," argues Swan. "That isn't to say many people didn't buy a Yaroze and then contribute nothing to the project, but I guess they didn't understand how hard programming can be and how much time is required to create anything satisfying."

For those who were willing to take up the challenge, the Yaroze







The Yaroze had its own loading screen (above). The quality of the work produced on the unit varied widely, but the limitations of one-man development teams saw an emphasis on gameplay over slick graphics

community provided an excellent education, with a number of competitions and the constraints of the machine encouraging experimentation with a range of game genres. "Working within the limitations of the libraries and mainly our own time and resources forced us to do stuff which was quick to do and fun to play. Many games had more in common with the 16bit days of fun 2D games than anything else," states **Charles Chapman**, whose company, Live Media, recently produced *David O'Leary's Total Soccer Manager* on the Game Boy Color. As Ferguson puts it: "The Yaroze taught me that technical slickness and gameplay are two completely separate things. Some of the most playable Yaroze games were the simplest, technically – and some of the most impressive and ambitious were a disaster to play."

Those members of the Yaroze community that are now working in the industry provide a range of glowing testimonies to the role played by the device. "Being responsible for every aspect of a game provided a great chance to work in every area of game development, from programming animation routines or AI coding to game design and creating art assets," explains Ferguson. "That said, I think having to work as part of a team on their first commercial game was a rude awakening for many Yarozers." Rutherford agrees: "For me, it was invaluable. In no particular order it provided education in: getting used to tools, working to hardware constraints, putting C into practice, getting projects finished, working to (competition) deadlines, giving and accepting comments or criticism, and code sharing. I was also lucky to have my **Edge** competition entry burnt on to a real PlayStation disc with some others – ideal for job interviews."

Higher education

For those like Swan, who were lucky enough to be on one of the several university courses that Sony supported with the Yaroze, the benefits were equally, if not more, pronounced. "I got involved through Middlesex University," he says. "I took the games programming strand of my degree, and was delighted to see it was working on the PlayStation. Otherwise I would never have known about Yaroze, and probably wouldn't have the job I have now." One of the particular advantages for those on the course, as Swan points out, was time: "I was programming on the Yaroze all day and made quicker advances than those doing it for a hobby. I think it prepared me as well as any non-industry experience could have done. It meant I wasn't put off by working on PlayStation when I got my job – I had other things to worry about, like learning to work in a team and working in a modular style."

Given the extraordinary success of those who graduated from programming the Yaroze, it would be a shame not to see the experiment repeated. But with the unit no longer available for purchase from Sony, and given the company's recent difficulties keeping the support site up and running, it seems unlikely that it will be resurrected. When Sony was busy rewriting the ground rules for marketing consoles to previously untapped audiences, wooing technological 'evangelists' was a key part of the company's strategy, as Phil Harrison pointed out at the time. With the launch of PlayStation2, it is no longer clear that this is the case.

"I doubt there will be a Net Yaroze 2," says Ferguson. "That said, there has been a lot of clamouring for 'NY2' on the Yaroze newsgroups – bizarrely, most from people who achieved very little with the original machine." **Tom Madams**, currently a student at Bristol University, concurs: "I think that it's unlikely that anything like the Yaroze will been seen again, although I hope I'm wrong. With the growing

Deriving its title from the Japanese for 'let's create', Sony's Net Yaroze was in cutting edge black some years before PlayStation2

"I think programming the Yaroze prepared me as well as any non-industry experience could have. It meant I wasn't put off by working on PlayStation when I got my job – I had other things to worry about, like learning to work in a team"

While Tom Madams is still at university, Nick Ferguson, who kept a diary about the Yaroze community, broke into the videogame industry through stints at Creature Labs doing AI scripting, and at Rare, as a games tester

Prior to his involvement with the Yaroze, Charles Chapman already had programming experience and was running Live Media, which is currently working on a 3D pool game for GBC. Bob Shand is still at university


Tom Madams
student


Nick Ferguson
Ragdoll Ltd


Charles Chapman
Live Media


Bob Shand
student



As with other bedroom coders, members of the Yaroze community favoured RPGs and ports of retro classics to cut their teeth on



"If the Yaroze does fade away with no replacement, then it would be a shame, since for the people who have been involved it has surely been a success, with virtually everyone who wanted to get into the industry from it having done so"

complexity of next-gen consoles, I don't think one person has the time to produce a game that would stretch the console's capabilities."

To be continued?

So where does this leave the next generation of bedroom coders? "If it does fade away with no replacement, then it would be a shame, since for the people who have been involved it has surely been a success, with virtually everyone who wanted to get into the industry from it having now done so," points out Chapman. But as **Robert Shand**, a student at the University of Abertay-Dundee, rightly argues, the economic incentive for companies like Sony are limited: "Maybe it was just a unique experiment from a company that didn't have to do anything like it did. They supported the end users, and let them try new and interesting things, with commercially sensitive information. Maybe some other companies should take a leaf out of Sony's book." Or as Swan puts it:

"I think it shows that there are people looking to get into the industry who need a logical first step forward, which only until recently wasn't even supported by universities. If Sony created a plan that would offer this obvious step into the industry it could end up with a new loyal programmer base, and be widely respected for it."

Of course, any regrets about the demise of the Net Yaroze must be tempered with the awareness that there are far more opportunities open to those who wish to enter the industry than was the case when the unit was launched. **Edge**'s own annual 'Playing The Game' supplement attests to the growing panoply of university and college courses available. And as Rutherford contends: "There are always opportunities out there, and I think those that are dedicated enough will sniff them out – like Yaroze."

Could it be then that the best way forward for companies like Sony – which relies on the skills of talented artists, designers and programmers to ensure the commercial success of its software and the hardware on which it is played – is to provide educational institutes with access to the sort of stripped down development kits that were available to the public in the Net Yaroze? Swan's experience on the first university course to use Yarozes outside of Japan would certainly indicate that there is potential in such an approach: "It was exciting and very relevant to the career I wanted. As time goes by I hope that the courses will mature, and with a library of working code this will allow teams of students to concentrate on particular areas, and also learn the art of teamwork and communication." Shand's current experience at Abertay would also indicate that more work is needed in this respect: "As for degree courses I think they are a great idea, but they need more support from games companies. We need more companies coming to us and telling us what they want. We need more offers of placements, we need people to come and talk to us."

Whatever the ultimate fate of the Yaroze, Sony's disregard for short-term commercial gain in attempting to reap the rewards of encouraging creativity and spontaneity in the next generation of developers deserves the utmost respect, and should be noted by the company's vociferous critics, and indeed its competitors. If there is one lesson to be learnt from the Yaroze, it is that there is a huge seam of potential videogame developers that may not find their way into the industry otherwise. As Ferguson concludes: "The fact that so many members have gone on to work in games is testament to how serious we all were about it, and how much we wanted to be a part of the industry we love." It would seem foolish not to do something about it.



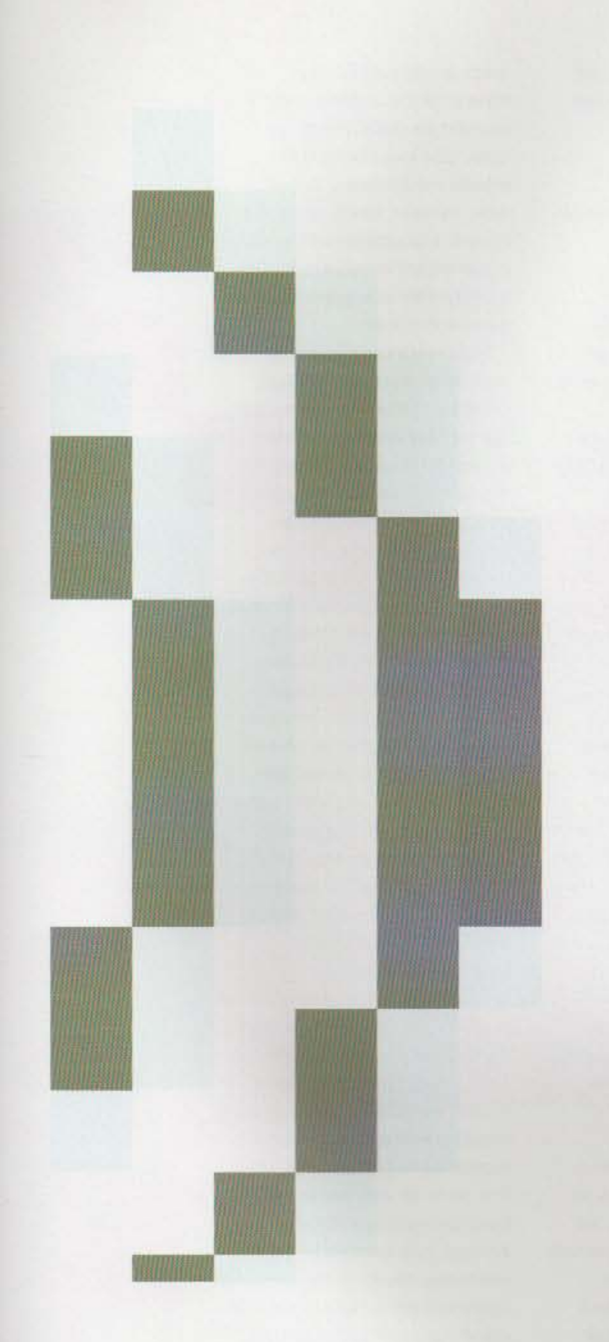


Snowball Fight, by James Rutherford, was runner-up in the **Edge** Net Yaroze First Anniversary competition thanks to its compulsive gameplay mechanics

Nick Ferguson's Yaroze diary can be found at the following location: http://www.saqnet.co.uk/users/nickf/public_html/diary/diary.htm

Though no longer updated, the Net Yaroze Times is also a source of information: http://www.geocities.com/TimesSquare/Alley/2200/nytimes.html

sonic boom



Audio in videogames has always been problematic. Get it right and no one will notice, get it wrong and you'll be hung out to dry. The advent of consoles with vastly enhanced sound capabilities promises much, but will what is delivered match up to the expectations of the 3D-surround multiplex generation? Edge talks to the professionals dedicated to that achieving that very goal

The original, best, and most durable 'emotion engine' has existed within every games machine of the past 15 years. Long before Sony staff colluded in order to choose a name for the PS2's CPU, another device had facilitated involving content and mood-altering inflections too numerous to mention. Long after the PS2 has been supplanted by successive generations of gaming hardware, it will still abide at forefront of entertainment software. The more traditional name for this remarkable device? The sound chip.

From simple beeps to streaming audio, accurately modelled spatial sound effects to reactive music, videogame soundtracks have progressed from being a post-development afterthought to, finally, being steadily recognised as an integral aspect of the gaming experience. Just as watching an



The *Wipeout* series perhaps represents the paradigm for using licensed music in videogames. Not only did the agreement benefit both sides, but you can bet Sony wasn't upset by the net results

affecting or arresting movie with subtitles but no sound is a shadow of the full experience, how many modern games could offer the same appeal without aural accompaniment? As keen devotees of world cinema will attest, watching films untouched by the modern Hollywood fixation of scoring almost every moment can be a strange experience. Not having your emotions constantly manipulated by a context-sensitive soundtrack can be liberating – restrained use of audio can, after all, be just as effective – but if a highly charged scene makes a person grit their teeth at the 'bad' guy, or eyes water at a death or a parting, it's odds on that the score will be responsible for actually making the adrenaline or tears flow.

Recent studies on legitimate techniques used by athletes to boost their effectiveness revealed that, by playing a favourite song beforehand, their performance could enjoy a statistically significant boost. Music holds power: there's no disputing the fact. In these eight pages **Edge** looks at three aspects of audio within the games trade – from licensing songs from bands, through future videogame music technology, to the oft-disputed merits of reactive, context-specific soundtracks.

Licensing pitfalls

While there are a number of talented musicians working within the games industry, licensing music by known artists has an abiding allure for developers and marketing departments alike. Using tracks by then-popular chart acts such as Betty Boo and Bomb The Bass in its 16bit games was, in retrospect, a remarkable, pioneering achievement by the Bitmap Brothers. While the move evoked cries of 'gimmick!' at the time, it proved hugely successful. The publicity the music generated, within the specialist press at least, raised the profile of the codeshop, publisher Renegade, and titles like *Xenon 2* and *Magic Pockets*. The Amiga was a fine game platform, but never a fashionable format. For a fleeting instant, a link was established between what was still a young, predominantly 'hobbyist' industry and an established, glamorous cousin.

Psygnosis's *Wipeout*, similarly, used existing tracks by 'name' musicians to great effect. Cleverly, it also featured acts that then hovered in the kudos-heavy locale that lies between underground and mainstream popularity. The association established between *Wipeout* and *Wipeout 2097* – its far more playable successor – and the likes of The Prodigy and The Chemical Brothers bestowed considerable credibility upon both titles. Without the soundtracks, it's arguable that both might otherwise have suffered a relatively modest entry in the annals of videogame history.

A popular but perhaps slightly specious observation is that *Wipeout* almost singlehandedly sounded the death knell for the 'geek' label long attributed to entertainment software. Its real value, however, was its contribution towards a broadening of horizons for publishers and developers. In truth, it changed the videogame industry's perception of itself.

Both instances suggest the potential for a powerful marriage of interests between the music and gaming industries, yet such reciprocal arrangements are still relatively rare. In principle, it seems a mutually beneficial approach. The music execs get to promote particular bands to an audience of potential buyers, and it's appreciably focused advertising to a joypad-wielding demographic where disposable incomes abound. The videogame publisher, ideally, gains a modicum of cool by association; as if it were a butterfly, lingering contact with the right song will lend a little colour to the football or driving game in question. The harsh reality is that such arrangements can be prosaic or even damaging – and it's the software industry alone that suffers in such instances.

There have been games (although few, with due irony, spring readily to mind) where a licensed track has inspired barely a mention. Worse, though, are the times where music bought in from a famous external source has had a detrimental effect. One particular story (names have been removed to protect the once innocent, now twice shy) involves a well-known developer that entered an agreement with a 'name' band. With everything signed and sealed, the band provided a DAT with three tracks, only one of which could be used. The first, the codeshop agreed, suited its triple-A title perfectly. Its

Videogame music: the early years

Videogame soundtracks – and the processes involved in their creation – have evolved beyond recognition over the past 20 years. From David Whittaker to Rob Hubbard, *Lazy Jones* to *Skate Or Die*, the standard of 8- and 16bit music was occasionally startling. Deprived of the luxuries other tunesmiths, commercial or otherwise, take for granted, there were even instances when certain musicians would write a piece of music that gained greater recognition than the game it was designed to complement.

The story of videogame music, from its earliest origins to the advent of CD-based gaming systems, rather warrants an article of its own – which is why it (and its most celebrated practitioners) are scarcely mentioned within this feature. Those new to gaming who rarely understand what the fuss is about should make a visit to http://homepages.enterprise.net/beej/biglist.html to gain an insight into the sheer quality of certain early, non-CD-based endeavours. Tim Follin's *Ghouls 'n' Ghosts*, in particular, is a magnificent track – it can be played on a PC with Protracker or Winamp, and it's more than worth the effort.



tempo was perfectly pitched, its atmosphere curiously redolent of the action it would accompany. Unfortunately, the band was keen to use song number two – a banal piece with the charm and feel of elevator music. Due to its superior bargaining position, the band won the dispute. Even the publisher of the game backed the decision, disregarding pleas to the contrary from irate creatives.

Despite relative parity in recognition and generated revenue, many feel that the software industry is seen as a poor relation by the major music labels. A developer may desire a high-profile song, but by virtue of that track's popularity, the record label has already secured ample publicity via traditional channels. Understandably, it will regard the approach by the devco or publisher as it would with a similar proposition by an advertising agency: cold, hard cash up front, or another profit of comparable worth. By contrast, a label might jump at the opportunity to resurrect a song that has disappeared into obscurity, or an act that has yet to chart, but this will invariably confer little tangible benefit to a game. The protracted development periods (and slippages) that haunt game development are an added complication. A month is a long time in music.

If there's little expenditure involved, there's little harm in using music from a known source. Sensible Software signed 'individual' '80s popster Captain Sensible to pen the music for Amiga classic *Sensible Soccer*. It was a nice touch, inspired by Sensible co-founder Jon Hare's passion for music, that resulted in a cheesy, sanguine tune, a curious entry in *Soccer's* credits, and a later opportunity for **Edge** to relate an obscure piece of gaming trivia. (Hare, reputedly, later attempted to gain a commercial release for *Cannon Fodder's* reggae-tinged title track in what would have been a rare instance of videogame music moving in the opposite direction. Unfortunately, the game's release prior to Remembrance Sunday, not to mention the sampled lyrics that so delighted fans – 'War: never been so much fun', and 'Leave him lying in his uniform, dying in the sun', being two choice excerpts – put paid to its chances of ever hitting even the tail end of the charts.)

Gremlin, however, did not seem to benefit by the presence of Robbie Williams' 'Let Me Entertain You' in *Actua Soccer 3*. The bizarre option to play the track repeatedly during matches rather suggests that Gremlin was either starstruck, had paid handsomely for the rights, or both. *Actua 3* was a commercial disappointment – and, as rumour has it, a contributing factor in Gremlin's decision to roll over when new master Infogrames entered the metaphorical room. By contrast, there was no danger of SquareSoft crashing and burning when it used famous Chinese popster Faye Wong's 'Eyes On Me' in *Final Fantasy VIII*. The track is, however, excruciating drivel unless formulaic, sub-Celine Dion love songs are to your fancy. It may only last for minutes, but its jarring assault on players' ears is at odds with an otherwise excellent soundtrack. In particular, the internally designed orchestral piece that accompanies the game's opening FMV, with a chorus chanting Latin verses – beginning with 'Excitate vow e somno, liberi mei. Cunae non sunt', or 'Kindle a vow from dreams, my children. There are no cradles' – is magnificent.



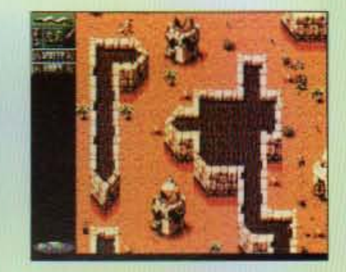
Surround sound is now very much available to developers, but how they choose to take advantage of the six-speaker potential of the Dolby 5.1 system, for example, is far from clear at the moment



Final Fantasy VIII is a good example of the fallout that poor audio choices can generate. A single tune – 'Eyes On Me', by Faye Wong – on the game's enormous soundtrack elicited venomous user feedback

And yet it doesn't take a genius to guess which song garnered the most column inches, despite widespread praise of the latter by fans.

John Broomhall, Hasbro's head of audio (and also, incidentally, chair of BAFTA's Interactive Music Awards for the year 2000) is hardly starry-eyed where bought-in soundtracks or title tunes are concerned. "I've met in-house audio people who feel threatened by the use of licensed music in the games they're working on," he reveals. "To my mind, it all comes down to 'horses for courses'. Some games lend themselves well to the application of music not



Jon Hare of Sensible Software attempted to usurp the natural order of things by considering releasing the reggae-tinged soundtrack to *Cannon Fodder* on vinyl

"I've met in-house audio people who feel threatened by the use of licensed music in the games they're working on. To my mind it all comes down to 'horses for courses.'"

specifically composed for the title. Obviously, in some instances there's clearly a marketing or PR hit for having a big name involved. However, I doubt that many games really benefit massively in sales terms from celebrity involvement in the soundtrack."

Additionally, the question is whether the expenditure or effort involved in acquiring the right high-profile soundtrack really worth it for developers. As Broomhall states, it

MY MUSIC

Russell Shaw
Head of sound and music, Lionhead



"There was a time you could guarantee a conversation like this: Musician: 'I'm not too happy with that gun sound, I think I can make it better.'
Producer: 'I wouldn't worry about it – at the end of the day it all comes out of two tinny, crap speakers.'
Black & White has been a study in 'reality-meets-fantasy' from the very start. Looking down on a real living, breathing world presented the challenge of creating believable ambiences and organic sounds, coupled with the might and magic of spells and miracles. Throw in all the dynamic changes from good to evil atmospheres and it's virtually indistinguishable from what you would hear on a movie soundtrack.

"Hopefully, the millennium should herald what a lot of us have been awaiting since we entered this industry – now we have all the technology and are comfortable with it, it's reasonable to suggest that no future games should be fettered by cheap, unrealistic audio and music for any of the game genres. 2001 is my year for checking out what the competition has been doing while I've been cocooned in the *Black & White* dev room."



Dolby has long been synonymous with entertainment audio, and is committed to developing the the awareness of audio capabilities in the videogame industry

doesn't really reduce the workload: "Of course, someone still needs to specify the music cues, and do the edits – and that still comes down to the in-house people. I think that often the title track can be licensed, but the in-game music – which is more functionally linked into the gameplay – needs to be created specifically for the scene in which it will be used."

Indeed, the use of Apollo 440 or Blur on the front end of EA's *FIFA* is a world away from the complexity involved in scoring an adventure, or even an action-oriented FPS. Few musicians will have an appreciation of the processes involved; to pen an apposite chord sequence is an undeniable skill, but to actually use tunes effectively in a game of moderate complexity is another talent entirely. Despite David Bowie's many years of musical experience, his involvement in Quantic Dream's *The Nomad Soul* did not extend to the exact placement of spot atmospherics and orchestrating context sensitivity. Which rather begs the question: with Bowie the preserve of a more mature (and probably non-gameplaying) audience of late, what did his contribution add that Quantic's own in-house songsmiths could not?

"It's all very well seeing famous names credited on game soundtracks," says Broomhall, "but it would be interesting to see what Underworld or whoever would come up with if they were actually commissioned to compose specifically for a game. I suspect that's what many an artist would prefer to do, rather than games just being an ancillary revenue stream for their existing stuff." To sign an established band to design and write even a single song, however, presents a not-inconsiderable risk. What if their work is, not to put too fine a point on it, crap? Gently informing an in-house muso that his work isn't up to scratch is one thing; inviting a high-profile band to 'try again' is another matter entirely. In the former instance refusal may offend, but it won't jeopardise a substantial investment.

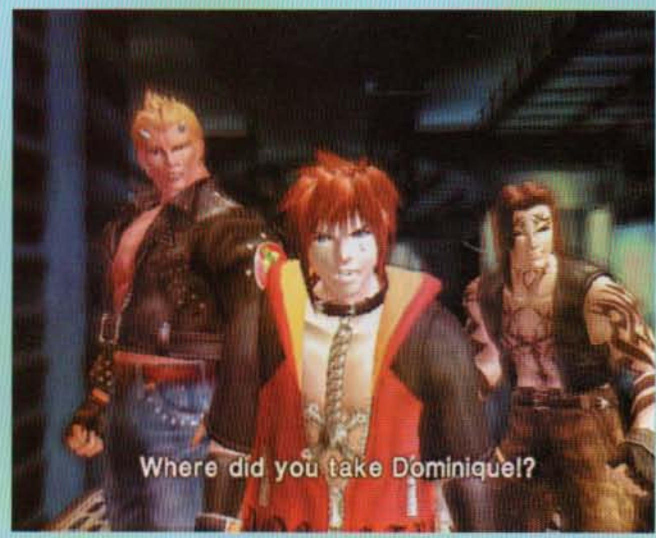
Love is all surround

Hardware limitations were once ample justification for the limited audio content of early games, but the introduction of reasonably powerful sound chips and the ability to stream data has raised expectations far higher than ever before. Modern consumers, if prompted, will most likely opine that they would hope for videogame soundtracks and effects to rival movies, TV, and popular music. Understandably, the effort of maintaining a high level of professionalism with exponentially increased audio content is leading to wholesale changes in the way it is produced.

Rik Ede, as Dolby Laboratories' games production manager, has evangelised on the subject of advances in audio technology for the past three years. Naturally, as an exponent of next-generation techniques, he recognises that the days of the sole musician generating content for an entire codeshop or publisher are numbered, if not already past. A new era of specialism, having already dawned in other disciplines, is revolutionising in-game acoustics.

"Audio departments are getting bigger," states Ede. "The days of the jack-of-all-trades, the guy who does all the music and sound effects, have gone. Most of the major developers – and even some smaller developers – have a dedicated person who writes and produces music, and at least another guy who concentrates on sound design. This is because, believe it or not, audio *is* starting to be recognised as part of the gameplaying experience. In theory, this should mean that the sound effects you hear have been 'custom built', rather than simply getting 'Door Closing Sound No 23' from a effects CD plonked in.

"One of the joys of my job is that I get to see – and hear – what is going on in most of the game audio development studios. Yes, there are still a few guys working in a cupboard with a pair of headphones and a Bontempi organ. On the whole, though, we are starting to see more money being spent on audio staff, sound-proofed facilities, and more toys for making noise than you could dream of. Of course, this alone isn't a recipe for success: if you put shit



PS2 comes equipped with the capability to deliver movie-style surround sound – an essential given its function as a DVD player – and games such as SquareSoft's *The Bouncer* will use it

in, you'll get shit out. No sprinkling of magic fairy dust will ever replace the underlying talent that these guys have to possess."

Unsurprisingly, Ede's day job involves encouraging (and, later, assisting) codeshops in the use of Dolby Digital 5.1. "Researching audio technology and its relevance to gaming is in itself a full-time job," he remarks. "The inclusion of DVD-ROM drives on PCs and next-gen consoles can only further enhance the consumer's expectations. After all, when the gamer hooks up his PS2 to the home cinema system, expecting to hear the Dolby Digital 5.1 soundtrack that he hears on DVD movies, he's going to ask the question: 'Well, the box can do it, so why is the game in mono?'"

At this moment in time, 5.1 actually is getting heavy on the ears, remarks your correspondent.

"Did you really expect not to hear me whine on about how great Dolby Digital 5.1 is?" laughs Ede. "Of course not. It's all about convergence, though. I hate that word, but you know what I'm saying. Yep, not everyone has a 5.1 home cinema system at home, but – believe me – that is changing fast.

"Don't get me wrong, it's not a revolutionary advance in technology, more evolutionary – a natural progression from stereo. Part of my role at Dolby is to entertain the media, present demonstrations and educate people. Typically, I will drag them down to the studio in sunny Shropshire [recently submerged in the serious floods of early November – devcos should get in touch with Ede if they need flowing water FX] and play a piece of music that is in stereo and then the same piece of music in 5.1. Which sounds better? The 5.1 version, obviously."

A problem presents itself, though, in the fact that not everyone can afford or accommodate the six-speaker set-up (left, right, left surround, right surround, centre, and the subwoofer – the .1) to experience Dolby's technology at its best. The effect is astonishing, but mainstream usage remains a thing for the future. The possibilities that such spatial sound technology can facilitate, however, know few bounds. Consider Konami's forthcoming *Silent Hill* sequel on PS2. As a crude example, consider walking along a dark, misty street. A sharp rattling noise resounds behind you and, as you catch yourself before you turn to look behind the sofa, quickly you rotate your character 180° to face the noise. It's merely a discarded soft drink can. Of course, in adherence with the enduring cinematic cliché, that is the very moment that beastly paws carrying deadly claws leap towards your character's back. Or is it your own back? Such simple devices, married with three-dimensional sound, will help blur the boundaries further.

Naturally, 3D music could also be a revelation. Rather than simply using it as an advanced form of stereo, adventurous composers could attempt to use the six speakers to perform incredibly creative soundscapes. In *Tomb Raider: The Last Revelation*, Core introduced a special visual effect to accompany energy drain while Lara is poisoned. It causes the screen to contract and expand in an attempt to convey Lara's dizziness to players. Imagine, though, the potential inherent in three-dimensional sound to allow the recreation of such visual tricks in an audio form. When Lara is poisoned, a music track could be triggered with five or six individual separate elements, each played through an individual speaker. Again, it's a simple example, but these could then be rotated in an attempt to gently disorientate the player. Developments in context-sensitive music, combined with 3D speaker setups, could blur the distinction between the roles of sound effects and music forever.

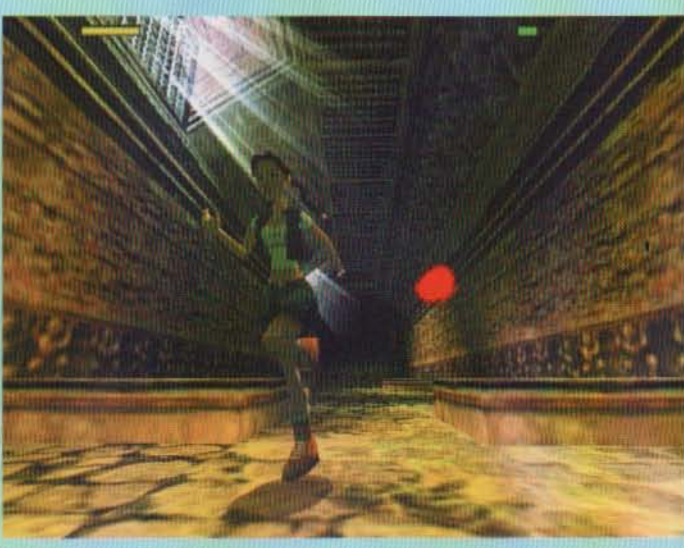
For some, context-sensitive soundtracks are the Holy Grail of composing for entertainment software. Other, however, have yet to be convinced that it is plausible, or even desirable

Full and faux context

For some, context-sensitive game soundtracks are the Holy Grail of composing for entertainment software. Others, however, have yet to be convinced that it is plausible – indeed, even desirable – to expend such effort coding something that can be at least approximated, with far less expenditure, with mere streaming audio. The attraction of music that automatically, authentically adapts in realtime to the situation in hand is obvious. The means of actually producing it without limiting aspects of the actual gameplay, spending millions on development, and increasing the gestation time of a game are less palpable.

With films and TV, there are two extents of scoring to accompany narrative content that can be compared to full-context sensitivity and 'faux'-context sensitivity in videogames. In especially lowbrow TV soaps, for example, certain scenes feature particular snippets of music that act as a form of aural signposting. A death or the end of a relationship, for example, would involve a 'sad' tune; a humorous moment, perhaps involving a naughty dog or suchlike, will have a whimsical little snippet. These are rarely rewritten, with the same tune used repeatedly in relevant moments – Australian soap 'Neighbours' has long been an exponent of this style of simple aural backdrops for key moments.

In contrast, Eric Serra's soundtrack for Luc Besson's 'Léon' involves an intertwining array of



In the same way that Core included a context-sensitive visual response to Lara getting poisoned in *Tomb Raider: The Last Revelation*, new sound capabilities could be used to similarly disorienting effect



Dolby Laboratories' games production manager Rik Ede operates as an evangelist for the new audio technology in videogames

MY MUSIC

Tim Wright
Creative director,
Jester Interactive



"The idea behind the *MUSIC* brand was to bring songwriting to the masses – not a completely unique idea, apart from the fact that we wanted to use home consoles. It's the kind of thing you can use in the lounge or bedroom, sitting in a comfy chair, rather than at a desk. We're currently working on a sequel for PlayStation2 which we hope to have out early next year, published through Codemasters. We're also taking the *MUSIC* brand to more and more platforms, both for the home and elsewhere.

"Audio in games varies in quality just as with any other media. Looking back over the last decade we've seen hardware advance markedly. As far as content goes, more time and thought is now put into game audio. Where a car would have had just one looping sample, we now use multi-samples with realtime filtering to give as realistic a result as possible. More channels means more simultaneous effects, creating a more believable environment, and with the adoption of surround sound technologies such as Dolby Digital, the player has a more immersive experience. At Jester we're working on a new, all-encompassing sound engine, which we hope will give as much control as possible over the sound environment."



While 'theme tune'-type audio, as witnessed in 'Léon', works well for linear entertainment such as films, dynamic interactive scenarios require an almost entirely different approach

themes, each complementing the 'feel' of the scene it accompanies. On a conceptual level, it differs not a jot from the work of TV production house Grundy with 'Neighbours', but its more diverse range of styles lends it a comparatively sophisticated transparency. You may notice extremes while watching – the piece that follows the solitary Léon in early scenes, the more upbeat tunes that accompany he and Mathilda's game of charades – but many elements of its music blend seamlessly with the images and dialogue. When Björk's 'Venus As A Boy' strikes up during the midway montage, it's almost jarring.

The hour or so of audio in 'Léon', however, would appear repetitive if used in a videogame. A linear piece of entertainment software has a dynamism; variability that movies or TV shows simply do not possess, at least prior to the introduction of interactive storylines. The original *Tomb Raider* had more than 60 streaming audio tracks on its CD, varying from spot harmonics for when Lara enters a large room, to several permutations of the main theme. Within a few levels, however, these became increasingly familiar. Similarly, *Final Fantasy VII* and *VIII* both used a raft of distinctive tunes to flavour its locales and plot twists – and most gamers who completed both could probably hum each one note for note by the time they reached Sephiroth or The Sorceress.

While composing tracks for 'The Simpsons', its musicians almost always score to suit the primary emotion in a situation, not the action or event itself. Individually writing the number of tracks required to offer the same with a *Final Fantasy* title, however, would be simply impractical. This is why context-sensitive music, while software capable of generating it on the fly to composer-defined styles and variations remains a thing for the future, is often limited to small yet pleasant cameo roles. The gentle introduction of a hi-hat rhythm as Mario swims through a tunnel next to a sunken ship, surfacing in a cave, is hardly epoch-defining in itself, but the diversity is pleasant. To write an entire soundtrack that alters smoothly on the fly, so to speak, means including planning the design of the system at the beginning of a development process. The greater the complexity of the game, the less plausible context-sensitive music becomes.

Bjorn Lynne of Team 17 is a well-known and respected game tunesmith. "Right now, I'm pretty excited to be working on a car racing game called *Stunt GP*," he enthuses. "I've also started to think about the music for another game that I can't put a name to yet. It's going to be cute and cuddly, and the music is going to be made up of 'building blocks' using our own in-house engine for interactive and reactive music. It's not horribly complicated, but it does allow for the music to change at any time. When a game condition alters, it will wait for the next 'musically sound' place to change – for instance, at the end of a two-bar or four-bar sequence. Thus, the new music won't just drop in like a sack of potatoes. Instead, it will all sound natural, as if it were written specifically for what goes on in the game."

"When a game condition alters, it will wait for the next 'musically sound' place to change. In this way the new music won't just drop in like a sack of potatoes. Instead, it will sound natural"

Sheer volume of material

Richard Jacques of Sega Europe has created CD audio tracks for both original titles and localisations (the reasons for why the latter can be essential could fill an article of a comparable size to this one). "I spent just under two years on all the audio side of *Metropolis Street Racer*," he says. "It took so long because of the sheer number of music tracks – 31 in total – and the varying styles. There was also recording and mixing, then doing all the sound design and



The radio motif in *Metropolis Street Racer* required Bizarre to generate separate 'stations' for the game's locations, resulting in the inclusion of different playlists, DJ patter, and even jingles

recording the car engines, writing the DJ script for the radio system, licensing adverts, and making up endless jingles. So far the response has been really positive, and people seem to find the radio system enhances the feeling of each city featured in the game.

"Right now I am about half way through the score for *Headhunter*. This will be like an action film score, and will be recorded with an orchestra here in London. It's going very well, and I'm arranging and orchestrating it as well, which is pretty time-consuming. I think sleeping will have to be put off until next year..."

The *MSR* soundtrack is certainly diverse, professional, and surpassingly authentic. The sheer lifespan of Bizarre's inspired Dreamcast debut, however, means that certain adverts and songs (tailored to London, San Francisco and Tokyo) may become uncomfortably familiar if a player remains in one of the game's three locales for an extended duration. Does Jacques believe that extensive reactive soundtracks will be plausible with the next generation of gaming systems? "I think in the next two to three years we will see some serious changes which will ring my bell about interactive music," he responds.

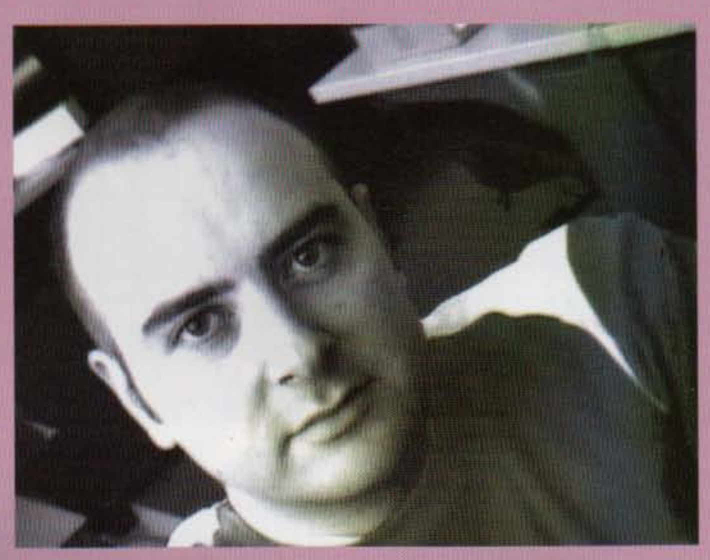
"There has been so much talk of interactive music this year, but there is still nothing that impresses me," laments Jacques. "It will be interesting to see how the X-Box's streaming capability will be utilised. I believe this is the way to go with regard to interactive music – by combining multiple streams with some chip-based music. On the last few projects I've worked on, I've always weighed up the pros and cons of doing an interactive score, but because of the quality issue, I have always always leaned toward linear, CD-based music. Some people may say this isn't right for interactive media, but technology has come on so much in the last five years now that the public simply don't deserve to hear a MIDI-based score – something that sounds like it has been produced on a Stylophone with a Speak And Spell on vocals."

"Ask any games muso which they prefer: streaming audio or MIDI?" poses Ede. "Streaming will always win, because they can use all the nice toys in the synth rack, effects processors and build a wall of sound. With MIDI-generated audio, you have a bank of samples sitting in sound RAM – there are varying amounts for different platforms." Obviously, the space allowed by sound RAM dictates the level of audio accompaniment – and the quality – a games machine can offer. Introduce music, and the space available for effects is decreased. There's little chance of being allowed to encroach upon other areas of the hardware to enhance realtime music generation, as some composer/programmer hybrids did during the 8- and 16bit eras. The performance hit would be frowned upon, although most likely prohibited outright, by programmers. Besides, if you're having to use a sound chip to play music, it's most likely because the programmers are spooling information from the CD – which also introduces performance-related issues."

Fully interactive audio

There's no disputing that many composers are no great fans of chip music as it exists on present consoles. "When we see consoles with 2Gb of sample RAM so you could fit a whole orchestral sound library into memory, then I would certainly be interested in hearing an interactive score," says Jacques, tartly. However, **Jason Page**, Sony's European audio manager, voices an alternative opinion: "I think the next generation of machines will really push the interactive side of audio far more than was ever possible before. Their processing power will allow clever uses of audio without making a noticeable hit on CPU processor power – and therefore not taking such a backseat to the graphics and programming.

"Of course, to an extent the game designs themselves dictate what style of audio will suit a game. Racing car games need engine sounds, but how they are recorded and implemented within the games I've been working on lately is a completely different process to how we would have done it, say, two years ago. I think the results speak for themselves. Audio is now sounding far more realistic than ever before, a lot of which probably goes unnoticed due to them being small, subtle touches. But if you remove those things from the game, then everything sounds bland."



Sony's European audio manager Jason Page believes that the next generation of consoles are sufficiently powerful to enable innovative uses of sound without a noticeable hit on CPU time

Ultimately, this is the immediate future for videogame music (and, in lamentable instances, muzak). It is the little tweaks, tricks and enhancements of existing techniques that, incrementally, are making soundtracks and spot effects ever more authentic. With Dolby 5.1, better sound chips, the sheer capacity of DVDs, and the prospect of multiple spooling streams in new consoles, game audio is poised to make a generational leap within the next half a decade. Of course, there's also the fact that – with MP3 purportedly threatening the revenue of major record labels – music industry execs may become far more receptive to the opportunities presented by the game trade. The question is, with in-house teams growing and hopefully gaining in experience and ability, will many codeshops even give licensing a second thought?

Which leads, in a roundabout way, to the soundtrack musician's rallying cry; a mantra often muttered by long-undervalued videogame composers, at last being accorded a modicum of the respect and resources their art deserves. It will be Page's permutation of the oft-voiced sentiment – there were others – that will be aired here: "Basically, audio in games is ignored if it is doing its job correctly. But if you remove it or implement it in the wrong way, everyone will notice."

Missing in action

Despite what you may believe, being a videogame pioneer didn't automatically lead to fame, fortune, and an assured future in the industry. Edge reflects on the experiences of ten formerly high-profile figures whose stories both highlight how things have changed, and provide possible pointers for the future

They came, they bought fast cars, they drove off – destination: superstardom. But for many of the founding figures of the industry the journey has been anything but smooth. A select few passed the finish line years ago, some are still stuck in traffic, others crashed on the first bend. It remains a sad truth that many of the greatest names in videogames never made it big, and for every Richard Darling or Jez San there's a Matthew Smith or Doug Englebart, men with arguably better credentials – but who you won't find in the *Times* Top 100 Rich List.

When you talk of *Deus Ex*, it's easy to forget that the man who first wrote a game of that name was not Warren Spector but Mel Croucher, the self-styled PiMan and a cult figure for years after he successfully switched from games to journalism. The games industry used to be littered with such colourful figures, men (primarily) whose ingenuity in squeezing great code out of 8bit graphics and 16K of RAM could teach the SquareSofts of today a thing or two, yet who have been laid comparatively low by poor judgement, plain bad luck, or the rough and tumble of business as a whole.

Today's software scene is almost unrecognisable from the charming but shambolic cottage industry from which it sprang. Largely built on blind optimism, makeshift accounting, and stock level guesstimates, programmers often signed their rights away for the security of a regular paycheque – the very antithesis of current practice where million-dollar properties like Lara Croft, Pokémon, and Mario are auctioned off way before the coding begins. Ironically, at a time when there is a dearth of original ideas, those ideas are now worth more than ever.

What would Andrew *Paradroid* Braybrook or **Sandy** *Ant Attack* **White** have given for such a market? Both were best-selling coders, both partially derailed by contractual wrangles and broken promises. Vague contracts, shoddy distribution, and poor accounting all took their toll on the 8- and 16bit community, turning geniuses into nobodies overnight. Even jockeys get their own benevolent fund to offer support when things go wrong, but in the '80s a programmer was out there on his own, with no more than a bemused bank manager for support. Those who succeeded and thrived brought in expertise or mastered business management, those who did not remained at the whim of ever-bigger publishers with little patience for design integrity or superstar egos. It is not hard to find voices maintaining the old ways were better.

"As for the business arrangement, there wasn't one," recalls **John Gibson**, co-founder of Liverpool's first great softco, Imagine. "Someone would say: 'You've got two months to write this game.


MISSING
bowpak
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Doug Engelbart
0386 638652
Please contact us if you know the whereabouts of this man
Suitable for home freezing on day of purchase in a four star food freezer or three star frozen food compartment, which should be -18°C or colder.
Use within one month. Defrost fully in a refrigerator before use: do not refreeze once defrosted.
KEEP REFRIGERATED BELOW 5°C
USE WITHIN 3 DAYS OF OPENING
FOR USE BY DATE
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Come back when you've finished it.' Now, it's: 'You've got 12 months to write this game, starting three months ago, and that includes the time you're going to spend attending meeting after meeting to discuss milestones, as well as the time you're going to waste writing code that will only be used in demos."

Should I stay or should I go?

Sticking too long with a publisher may have been detrimental to Gibson, but jumping ship too could prove equally hazardous. **Eugene Jarvis**, legendary designer of *Defender* and *Robotron*, was at the height of his powers when he parted company with coin-op pioneer Williams in 1981. Salaried at a then-respectable $40,000 a year, his employers offered him a comparable deal to that which worked so well for Shigeru Miyamoto at Nintendo.

"They offered me a bonus of cash and stock options spread out over four years," he recalls " It didn't seem like enough to me. The more I thought about it, the more I realised that game designers can get ripped off. The companies make millions and the designers get only a few thousand. So, I turned down their bonus and quit." Williams went on to dominate the coin-op scene, thereby making Jarvis's decision look more than a little rash.

The problems pioneers faced didn't just revolve around poor judgement or bad business sense, though. Tony Crowther (now of Infogrames) is probably unique in having developed hit products on six different hardware platforms to date. If readers are now unfamiliar with his name, this is surely through no fault of his own. His relative anonymity is down to a combination of factors: the demise of the solo programmer, the absorption of his beloved Gremlin into Infogrames in 1997, and the financial pressure that sees publishers more prepared to jump on a bandwagon than build their own.

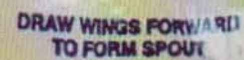
"Steven Spielberg got sucked into management and Charlie Chaplin never made the transition to talkies," opines Sandy White. "If I could have any one wish for the industry granted, it would be that there was some sort of gaming equivalent to the 'low-budget movie', some way for new ideas to be tried out without the creative restrictions that working on a big budget game imposes."

And then, of course, there were disasters which seem little more than acts of God. Back in 1986, **Mike Anderiesz** had the dubious privilege of launching *MUD*, the world's first multiuser game. Dubious because here was a title which had every reason to succeed, but was a commercial failure by virtue of being too far ahead of its time. *MUD* would be an easy proposition to sell now, and online versions are still popular on the Net (www.mud2.com). But in the days of hourly server crashes, a four-hour playing window beginning at midnight, and modems so slow they actually ticked as the data went through, it was impossible to attract more than a miniscule, albeit obsessive, CBM64 user base. *MUD* flopped big time, the developer's business manager committed suicide two years later, and Trubshaw & Bartle – the game's authors – were kicked into development hell for years. "Yes, I do feel guilty," states Anderiesz. "Although short of giving away free modems, it's hard to see what more BT could have done."

So, what became of these boy racers whose engines blew within sight of the chequered flag? Reassuringly, most are doing well and still employed in the industry. Nevertheless, it is hard not to feel a little cheated on their behalf. It seems unfair that movie directors, writers, and even pop stars get to enjoy careers that can last anything up to 50 years, whereas the majority of game designers are all but forgotten in five. This is an industry where creative burnout is not just inevitable, it is predetermined by market forces. How long would Scorsese have lasted if, like Crowther, he had been forced to master fundamentally new technology between every three films? Would Disney still be a global brand if it had been snapped up in its heyday and turned into Infogrames California? Indeed, when an industry takes so little care of its greatest assets, is it surprising that their contribution is so easily forgotten?

With disarming modesty, Gibson begs to disagree: "You'd probably be met with a puzzled expression from the majority of the game-buying public if you mentioned my old games, let alone my name. But I don't find it in the least bit frustrating that my old games have been forgotten. It goes back to that technology issue. When I look at my Spectrum games now it makes me curl up with embarrassment. No, I don't expect people to want to play *Zzoom* when they can play *Star Trek: Invasion*, or *Stonkers* when they can play *StarLancer*. It's not like music – Nat King Cole and the Spice Girls stand comparison; *Zzoom* and *Star Trek* do not."

Some, like Jeff Minter and Matthew Smith, seem happier out of the bright lights of celebrity but for others there is a sense of regret that more was not made of the tremendous opportunities afforded by a blossoming if unpredictable industry. Here, **Edge** profiles some of the movers and shakers of yesteryear who are now, apparently, missing in action.



FOLD RIGHT BACK



FOLD RIGHT BACK



MISSING



TONY CROWTHER

For the best part of five years, Crowther was the brightest star in videogames. His unfeasibly large, immensely playable games like *Monty Mole* (1984), *Captive* (1990), and *Realms Of The Haunting* (1997) helped launch and then prop up Gremlin Graphics for over a decade. Big, colourful graphics and pumping soundtracks (contributed in the early days by Ben Daglish) were his hallmarks, as was a reputation for producing games which pushed the boundaries of the machine while selling in large numbers.

Unique among programmers, Crowther has released products on six different platforms (CBM64, Amiga, CD32, PC, PlayStation, Dreamcast), all through Gremlin, Mindscape, or Infogrames. Not all those choices were wise – *Liberation* (1994) may have been a classic CD32 game, but how many people ever got to find out? Recently, too, a switch to console-style games like *Wacky Racers* has blunted some of his ingenuity, but for consistency and productivity he is surely unrivalled.

"I started very young in this business," he says. "I was 16 and had just left school, so I was prone to make mistakes. I think the biggest mistake was to leave Gremlin Graphics. I was one of the directors of the company, which was going strong. There was really no good reason to move on but I don't think I really understood the position I was in."

Like Eugene Jarvis before him, jumping from Gremlin, albeit a full decade before it became part of big-leaguer Infogrames, probably cost him a cushy directorship and a tidy sum in share options. However, like many naturals of his time, the basic need to keep writing games weighed heavier than the cold logic of corporate ladder-climbing.

"My problem was I enjoyed writing computer games, and being in a company didn't appeal to me. All I wanted was for someone to sell my games."

Crowther is currently coding for his seventh platform, on an unnamed PlayStation2 game due out next year.



MISSING



EUGENE JARVIS

The band of truly influential game gurus is a small one. Arguably only Miyamoto, Carmack, and Jarvis can claim to have directly influenced every generation of gaming that followed, and among the greatest of these is Eugene Jarvis.

Born in Paolo Alto in 1955, his childhood obsession with pinball yielded a flurry of table designs in the mid-'70s. A physics-lab encounter with *Space War*, one of the earliest videogames, led to his biggest contribution to popular culture – the game known as *Defender* (1980).

Defender broke the mould by being a shoot 'em up which could not be completed by simply memorising attack patterns. The fact that the screen scrolled right to left was also a novelty, something he probably now wished he'd slapped a patent on (which Atari actually did a few years later). This was followed by the equally ingenious *Robotron* (1982), the first arcade game to use twin joysticks and still the purest example of the shoot 'em up ever.

Although he left Williams in 1981, his own developer, VidKidz, continued to rack up hits (including *Defender II*), and he is now a director at Midway, where he is planning new arcade machines, pinball, and console conversions. Some, however, may argue he illustrates the classic symptoms of creative burnout. *Cruis'n USA* (1994) may have been a passable driving game, but is arguably no more representative of genius at work than Paul McCartney's last album.

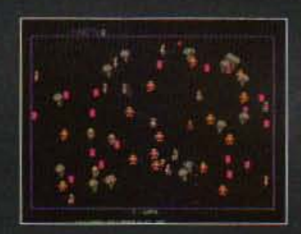
"My goal is to create a new generation of videogame addicts," he said, somewhat optimistically, in 1998.







Being just one member of the team responsible for *Wacky Races* (main) has done little to raise Tony Crowther's profile. His version of *Monty Mole* (above left), plus original titles such as *ROTH* (above right), hark back to another era







With excellent spot effects and scrolling which could shift at a frightening pace, *Defender* (above) became the aficionado's choice in 1980. *Robotron: 2084* (top left) added to the success, while *Cruis'n USA* has left little impression



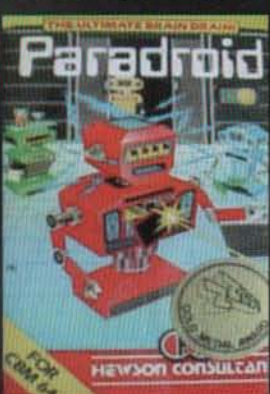




Ant Attack (above left) was a phenomenal success in its day, but *Zombie, Zombie* (above right) didn't do enough to differentiate itself from the original. The unusual firstperson *I, Of the Mask* (top) was accomplished but a poor seller







The vibrant *Rainbow Islands* (main) was a great success, but it was in the 8bit era that Braybrook really impressed gamers with his coding prowess. The Commodore 64 version of *Paradroid* in 1985 (above, right) combined shooting and strategy with a 'body'-swapping facility well ahead of its time



MISSING



ANDREW BRAYBROOK

When looking for the ultimate game coder of yesteryear, Andrew Braybrook sits near the top of the heap. Here was a man who could knock out quality arcade games in almost any genre, equally adept with his own designs as someone else's. His Amiga conversion of the Taito classic *Rainbow Islands* (1989) remains one of the best examples of console style gaming on a 'real' computer, a reputation cemented by memorable original titles like *Paradroid* (1985) and *Uridium* (1986) – still two of the titles most retro fans would like to see revamped for today's hardware.

Sadly, his longterm association with his original publisher turned sour in the late '80s, resulting in a protracted and bitter legal battle with founder/owner Andrew Hewson which ended just three years ago, and his own label, Graftgold, never achieved the prominence it deserved. Other titles like *AlleyKat* (1986) and *Nihilist* (1988) appeared, before a promising Amiga revamp of his old masterpiece, *Paradroid 90*. Three further games emerged, all on the Amiga, none measuring up to the quality of his previous work.

MISSING



SANDY WHITE

White's influence on UK gaming cannot be underestimated. Mouths literally fell open when, in 1983, *3D Ant Attack* first demonstrated isometric 3D on the ZX Spectrum. *Ant Attack* was followed by the equally impressive *Zombie Zombie* (1984), which added coloured sprites as well the god-like ability to deform and reshape the landscape, later used in Bullfrog's seminal *Populus*.

"I think the cottage industry of the time was more driven by programming innovation than by anything else," he says "If you were the first to write a starfield or vector graphics, or got a new sound out of the sound hardware, you could wrap a game around it and sell it off the back of that. It would be very difficult to do that now, as technical development has become quite incremental. The selling point now is gameplay, as it should be, or breast size, which I'm not so sure about."

White's next effort, *I, Of The Mask* (1985), sacrificed game design for the admittedly impressive feat of achieving firstperson 3D on a Spectrum. It generated negative royalties, and the loss of momentum was followed by the bad luck of developing the questionably titled *Dick Special* for Telcomsoft, just before it too was sold off.

"By the time I got to the end of doing my third Speccy game the fun had gone out of it and I was producing crap, so I stopped – but I only dropped out of games, not out of life. Since then I have made a career doing electronics and programming in other walks of life, but always with one eye on what games machines were doing in case it got interesting again. It got interesting for me again the first time I saw a PlayStation – all those polygons."

A short stint at Perfect Entertainment began in 1998, before he went solo again on his current project – a new physics engine designed to realistically animate action sequences and quasi-human motion. He is also collaborating with fellow Speccy veteran Jon *Match Day* Ritman on a new graphics routine for Game Boy Advance.

"My 'golden age' is yet to come, I hope," says White, who now has his own Web site at www.sandywhite.co.uk. "Games are just the barest hint of the growing interaction we humans are to have with our computers, they are what we do with consoles and PCs at present because we haven't come up with, or cannot yet implement anything else."







Commando (top left), *Sanxion* (top right) and *Thing On A Spring* (above) all benefited from Hubbard's unparalleled ability to get music out of a limited sound chip. His work remains perhaps the most fondly remembered by retroheads









With titles like *Revenge Of The Mutant Camels* (right) and *Llamatron* (top), you know you're in for something idiosyncratic. Minter continued his strain of offbeat coding by converting the psychedelic *Tempest* (above) from the arcade to both Jaguar and now VM Labs' fledgling Nuon system

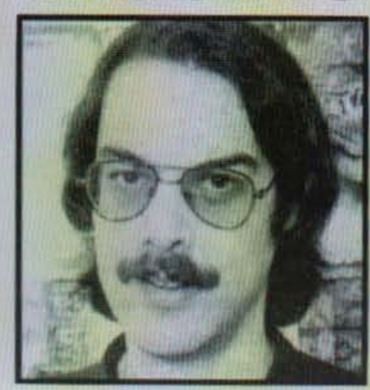
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ROB HUBBARD

There's something about Hubbard that brings a tear to the eye of game fans over the age of 30. It was Hubbard who first made the CBM64's SID soundchip sing; and not just damn fine tunes, but convincing instrument sounds, soaring guitar solos, and complex musical arrangements that truly complemented the frenzied arcade action they accompanied. Through the mid-'80s Hubbard produced soundtracks for *Thing On A Spring* (1985), *Monty Mole* (1984), *Commando* (1985), and dozens more, paving the way for later music maestros like Tim Follin (see p28) and Martin Galway, and creating a Web following for classic soundfiles that thrives to this day.

"The mid to late '80s were a real blast," he says. "It was a very creative period as there were basically no rules, and people were creating new types of games and graphic effects. Most of the machines were 8bits, so there was another challenge in trying to push the hardware and CPU to the limit."

However, by the early '90s computers were handling MIDI and even sampled sounds with ease, rendering Hubbard's unique ability in teaching limited chips to perform somersaults somewhat obsolete. He become audio technical director of EA in the States in 1988, managing audio requirements for the Redwood City studio across all SKUs. Lamented by fans at the time as 'selling out to the suits', he maintains the decision was both inevitable and prudent.

"It is very difficult for gaming creative types to adapt to constant change, and also to adapt to the needs and culture of the next generation of the gaming audience, who only live in the present, so to speak. Most of the experienced people get sucked into management because they have the knowledge and background, and understand what the problems are."

He remains a prolific musician and a prominent member of IASIG, a steering group of developers exchanging ideas on the advancement of interactive audio.

"Today we spend millions of dollars making games," he concludes, "and so no one takes any risks with new types of entertainment. This is a pity, because I'm sure there could be many more different types of games or interactive entertainment that could be created. Marketing people just don't want to take the risks."



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JEFF MINTER

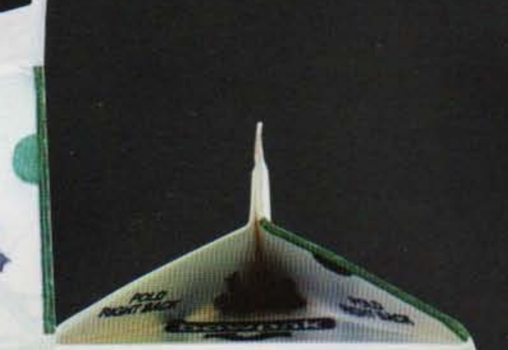
Surprisingly for such a backroom industry, very few games designers are true revolutionaries. Despite the occasional aversion to soap, most dream of turning into Jez San, corporate deal-maker, rather than Jeff Minter, corporate piss-taker. Call it hard selling or selling out; programmers like Minter are dying breed.

Everything about him was and remains rather enigmatic. His best games – the likes of *Revenge Of The Mutant Camels* (1983), *Llamatron* (1991) and *Tempest 2000* (1994) – all had a psychedelic tone and were predominantly based on classic arcade titles. His bizarre commitment to obscure formats (Atari Falcon, Jaguar, Konix MultiSystem), which virtually guaranteed his place in the hinterland rather than the frontline, and his curious obsession with furry animals, all set him apart. Nevertheless, a purist would argue that he epitomises all a videogame designer should be.

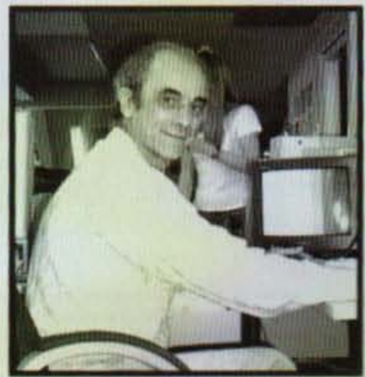
"Basically, I like to work with people who don't try and tell me what to do or what type of game to create," Minter explains. "People who trust me enough just to let me go away and get on with it without intervening all the time. I can't be doing with any of that bollocks of having to storyboard a game design and then have to get it past some kind of scrutiny just to get the project approved. Bollocks to that. I'm a game designer. If I say I'm going to do a game, then that is exactly what I'll do."

Minter works freelance for VM Labs, creator of the Nuon tech, which its manufacturer still promises can offer games potential to standalone DVD players. Typically, Minter is finishing up work on another version of *Tempest* (3000), and if that doesn't testify to his unique approach, then his expansive and quirky Web site surely does (www.magicnet.net/~yak/zoo.html). Refreshingly, he still maintains a credo for survival of his species. "Try to break free from the tyranny of genres a bit and let people have a bit more room for creative expression, I reckon," he suggests.





MISSING



JOHN GIBSON

Sometimes individuals are key for the teams they built rather than the games they made. Back in the mid-'80s Liverpool's Imagine software was the first of the great UK publisher/developers, at the heart of which was ZX coder John Gibson.

In these days of hysterical tabloid coverage of videogames, it is easy to forget that the first exponent of truly bad taste was *Zzoom* (1985). *Zzoom* purported to enable you to save fleeing refugees from a military force. In reality, gamers simply massacred them in droves, slamming torpedoes into liferafts.

Gibson enjoyed lesser hits like *Molar Maul* (1983) and *Stonkers* (1983) before Imagine began to believe its own hype, with stories of fast cars and millionaire executives eclipsing ever-longer delays for megagames known as *Psyclapse* and *Bandersnatch* – the first true exponents of 'Vapourware'. Unfortunate, too, was the rise of Ultimate (aka Rare), which boasted a logo and slogan strikingly similar to Imagine's, but sustained a more consistent run of hits. Gibson co-founded Denton Designs, which first served as an internal development team, then as a way out of Imagine.

"The popular myth is one of unsustainable corporate extravagance – plush offices and a garage full of Porsches and Ferraris," he recalls. "The truth is that the company put all its eggs in one basket and the basket broke. Imagine poured all its money into the 'megagames'. Despite having a development staff of around 70, only ten of us worked on these games. It became clear that the games were going to take far too long to produce and would be sold at a price no one would pay."

However, Denton Designs was soon sucked into fast-buck projects like *Frankie Goes To Hollywood* (1985). Gibson left the team in the mid-'90s to go freelance, but wound up producing games for Atari, many of which ended up as free demos. Even then, his ability to bounce back resulted in sterling work for Psygnosis on *Microcosm* (1994). Resolutely a 'coder' rather than a game designer, he now works for Warthog, partly responsible for *Star Trek: Invasion* (2000) and *Tom And Jerry: House Trap* (2000) on PS. He is currently developing a new GBA title.

"I only really have one regret," he concludes "And that's back in 1980 turning down the opportunity to get into 'mainstream' programming. With my programming acumen, I could have made a fortune out of the millennium bug."

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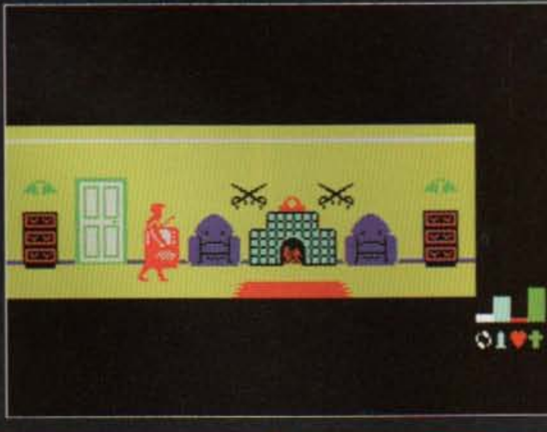
ANITA SINCLAIR

As the steam ran out of 8bit era, Sinclair burst on to the scene in 1985. The combination of an attractive face (admit it: programmers have never been beauty queens), formidable negotiating skills (she secured one of the best multi-title deals of the time from the BT-owned Rainbird Software), and a vision for adventure games unknown outside genre-leader Infocom made her a force to be reckoned with. That Sinclair was a woman is not to be underestimated, as even today a near-negligible percentage of game programmers and designers are female, and her achievement was all the more impressive because she was the figurehead rather than the engine room of Magnetic Scrolls, the company she formed in 1983 with her own savings.

It was Sinclair's energy and vision for sophisticated text-parsing, combined with Hugh Gordon's programming and Geoff Quilley's writing, which brought about *The Pawn* (1985), a complex text adventure with lush (albeit static) visuals originally for the QL, but an international success on the Atari ST and Amiga. It was followed a year later by *The Guild Of Thieves* (1987).

Other games like *Jinxter* (1987) and *Corruption* (1989) appeared before the team got sucked into perfecting a *Windows*-esque interface for drop-down visuals, known as *Magnetic Windows*, which was largely rendered obsolete by the rising stature of the PC. By the time BT pulled the plug on its software publishing and *Wonderland* (1990) was released by Virgin Mastertronic, the creative momentum had gone.

Sadly, the team then began to disintegrate, and the company entered insolvency in 1992. Microprose bought the brand but did nothing with it, and Sinclair herself suffered bouts of ill health before eventually seeming to lose interest in games. She is still around, and was last spotted in the US – still making deals. But the industry is clearly a less dynamic place without female role models of her stature.







Frankie Goes To Hollywood (top), *Zzoom* (above right) and *Star Trek: Invasion* (above left) disply Gibson's gift for reinvention. From Imagine through to Denton Designs and now with Warthog he has always sought out new challenges







Magnetic Scrolls' titles began to draw in people who had been put off by wordy adventures accompanied by nothing more than a black screen. The combination of pretty locations and intelligent puzzles saw the games sell in their thousands



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MATTHEW SMITH

With the possible exception of Jarvis, no programmer inspired more irrational fervour than Matthew Smith. Despite only ever producing four games (*Styx*, his first, was released in 1982) stories of his millionaire lifestyle fuelled Spectrum gossip columns for years, largely orchestrated by a generation of PR men who seemed to have forgotten that selling product was their primary objective.

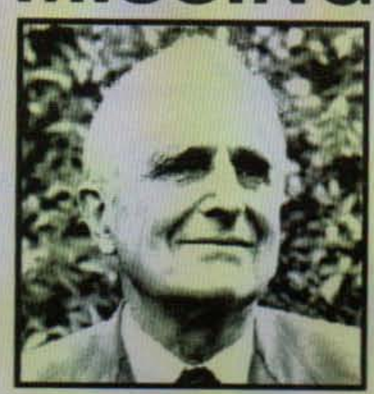
Smith was the epitome of the nerd made good, one day hanging around a Tandy shop in Liverpool, the next picking up £40,000 royalty cheques and falling out with his publishers in pure rock star fashion. *Manic Miner* (1983), however, was something special, refining the concept of pixel-perfect jumps and episodic platform gaming way before the *Mario* series perfected it. The much-hyped sequel, *Jet Set Willy* (1984), made him a Spectrum legend, despite bugs which saw the hero plummet to his death ad infinitum.

By his 19th birthday, few doubted Smith would become the UK's best programming export, with another sequel in the wings (*Miner Willy Meets The Taxman*), and even bigger ambitions on the horizon.

"I don't particularly want to be a star," he told *Big K* magazine in 1984. "I just want the recognition I think I deserve for writing good programs."

And then nothing. Sinclair-centric Web sites fanned the find-Matthew-Smith fire for several years, reporting a raft of unusual stories concerning his whereabouts. He's running a motorcycle-repair shop somewhere in Europe, suggested one. No, he's living in a hippie comune somewhere else outside of the UK, claimed another. A friend of the coder even got in touch with **Edge** around 12 months ago, offering an interview – in exchange for hard cash. Negotiations began, but then the 'friend' simply disappeared...

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DOUG ENGELBART

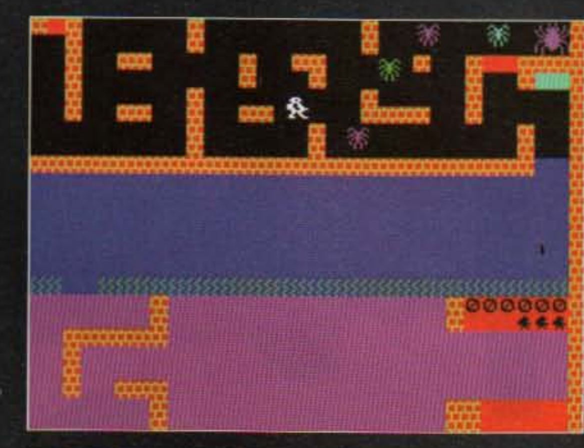
If the name is unfamiliar, that surely encapsulates the tragedy in a nutshell. Engelbart's influence on modern gaming (indeed on every form of computing) is second to none for three important reasons: 1) He invented the mouse; 2) He invented *Windows*; and 3) He invented online networking. Any one of these could have made him a billionaire; instead he made around $10,000 in bonuses from all three combined and watched indignantly as other companies stole his ideas.

Engelbart was a former army radar technician working on projects for the Stanford Research Institute (SRI) – a lesser version of MIT. On December 9 1969 he unveiled his big three innovations at the same seminar, to bemused students and researchers in Los Angeles. His designs were overlooked by the likes of Hewlett Packard and IBM, yet were somehow absorbed into the research projects of Xerox and Apple, while Engelbart's team slowly broke up during the '70s. His funding was withdrawn in 1977, whereupon he attempted to follow his designs to McDonald Douglas. Admittedly, his attitude did little to help his job prospects: he famously turned down a job from Steve Jobs in the '80s after lambasting the Mac's design spec. Still, the speed with which Silicon Valley turned its back on him was alarming.

"I was sent to Siberia," he recalls. "The rate at which a person can mature is directly proportional to the embarrassment he can tolerate. I have tolerated a lot." Close friend Paul Saffo puts it rather more poignantly: "At least in Siberia you can no longer see the revolution. Doug drove past the revolution every day and wondered 'why'?"

Now 75, he continues to pioneer new ideas with stubborn integrity. Contrary to Moore's law and just about every other, he insists computers have advanced enough and it is time for humans to catch up. His BootStrap Institute argues the need for new interfaces, and a new balance between innovation and automation. Ironically, he still uses accommodation rented to him by Logitech, another company that made millions from his original ideas. Three billion units later, there is still only one mouse.

"I didn't do this to be famous" he tells **Edge**. "How much money can you give to a guy who's just doing his job?"







Styx (top) was hardly the most popular Spectrum game, but it proved a good testing ground for the man who would eventually code the seminal *Manic Miner* (above) and *Jet Set Willy* (left). Even the prospect of falling into another screen to death after death would not compromise the game's success







An interface shaped like a mouse? How ridiculous. Eventually, though, Englebart is becoming recognised as the man who delivered *Windows* (top left), the mouse (top right), and online networking. It didn't net him a Bill Gates fortune, however

Edge's review policy

Every issue, **Edge** evaluates the best, most interesting, hyped, innovative or promising games on a scale of ten, where five naturally represents the middle value. **Edge**'s rating system is fair, progressive and balanced. An average game deserves an average mark – not, as many believe, seven out of ten. Broadly speaking, scores correspond to the following sentiments: one: disastrous, two: appalling, three: severely flawed, four: disappointing, five: average, six: competent, seven: distinguished, eight: excellent, nine: astounding, ten: revolutionary.

Videogames on the Edge

Titles slowing productivity this month

Shenmue

The confusion between fantasy and reality became obvious when **Edge**'s reviewer began taking his shoes off before entering the office.



(DC) Sega

Hang-On in Shenmue

Sega's gaming nous and foresight is unquestionable. The company began advertising *Shenmue* back in 1986, as these *Hang-On* billboards will testify.



(DC) Sega

Space Harrier in Shenmue

It's still completely unforgiving but *Space Harrier* offers a slice of gaming heaven. The learning curve is spot on and stands as an example to other shooters.



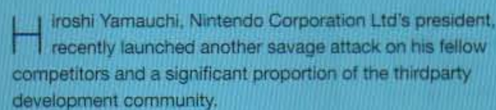
(DC) Sega

Darts in Shenmue

Ryo is too young to drink alcohol, but he still to pull off a passable impression of Mr Wobbly Hand when engaged in this diverting game of pub sport.



(DC) Sega



Picking from the tree

Only top titles will help revive the market

Hiroshi Yamauchi, Nintendo Corporation Ltd's president, recently launched another savage attack on his fellow competitors and a significant proportion of the thirdparty development community.

Essentially, Yamauchi-san argued that whereas once upon a time unleashing an army of thirdparty companies on a new console would almost guarantee a healthy market share, this is no longer the case. The race to get as many useless companies on your side is over, he argued, before going on to slam the boom in numbers of codeshops, stating that many of them don't know the first thing about videogames, and as such are detrimental to the industry.

Even by Yamauchi-san's standards, this was a venomous strike. But not, however, an unjust one. **Edge** will be the first to admit that the popularity of PlayStation and the rise in public awareness of videogaming over the last few years has seen an unhealthy number of opportunists gatecrash the party with a view to making money first and entertaining games last. These companies litter the videogaming industry and clog the display shelves with their shameless, inferior, cash-in efforts, hoping to rob punters of their disposable income. Not necessarily a problem for the gamer who does his/her homework before handing over the currency, of course, but these substandard products have a more serious effect: they confuse the game-buying public.

The videogame market is saturated. There are simply too many games available right now, and only a handful of those are selling in sufficient quantities to fill their publishers' coffers. The rest are simply bewildering what some term 'nouveau gamers', who represent the largest chunk of the gaming public.

What is needed is fewer games of a higher quality (think *Majora's Mask*, below). But that's neither a software drought N64-style, nor is it the absurd abundance constituting the PlayStation market. Somewhere in between those extremes exists a happy medium. Poor games, more often the cause of a publisher's pressure on a developer to get a game out before the end of a financial quarter, will still appear, of course, but hopefully with less regularity than is the case right now.

Which means that in the long term, everybody benefits. But then again, videogame publishers have traditionally opted for quick-return models, rather than sit back and absorb the whole picture. The current lapse in the market may make them reconsider their approaches.











Shenmue

Format: **Dreamcast** Publisher: **Sega** Developer: **In-house (AM2)** Price: **£40** Release: **December 1**

There is a moment in *Shenmue* when your absorption the game suddenly becomes apparent. For **Edge** it was in coming across a family snap of the Hazuki family while idly rummaging around some of the drawers in the house. The moment was not dramatised with music, nor was it accompanied by a lengthy cut-scene, yet the image of the happy group – which includes the hero's murdered father – is poignant none the less. The photo has absolutely no functional value in the game, but this is the point. It serves as one of the many details which make the *Shenmue* universe feel complete.

This is involving, and ultimately rewarding, but only represents a step towards what may be possible in the future, rather than a milestone





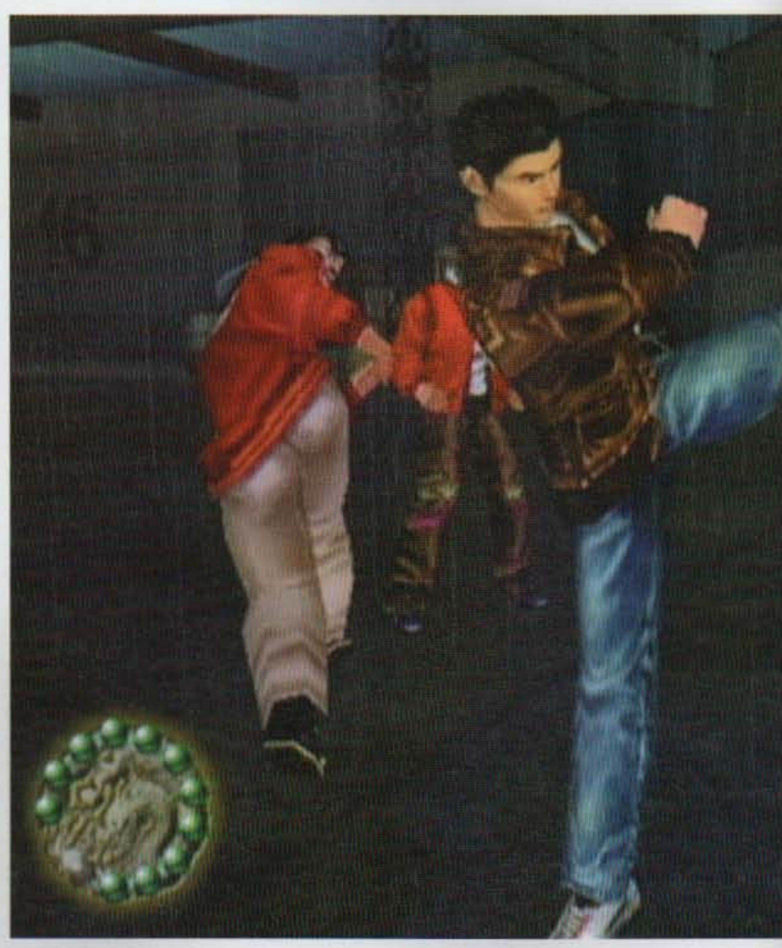


You will be spend considerable amounts of time and money in the local arcade centre. Partly because both *Hang-On* (above) and *Space Harrier* are still great fun, but also to kill some dead time

Many may want to deride some of the voice acting in the game, the pop-up, or the often rusty RPG mechanics, but *Shenmue*'s spell will seduce all but the most cynical gamer. There are layers of depth which make *Shenmue* a more involving game than anything else you are likely to play this year. Enter the basement of the Hazuki home, for instance, and you will blindly fumble around without light. But overcoming this difficulty is not just a case of locating the torch à la *Resident Evil* – that is only one of the options. The spent bulb can be replaced with one from the local store, or if you are less inclined to spend the money that Ryo's mother gives you every morning, you can take some candles from the dojo and light them with matches from the kitchen.

It is not total freedom, because that would imply a more direct control over action and event than *Shenmue* offers, but it is the closest a game universe has come in giving the impression of independence outside of your actions. While the trick is flawed, the vision and execution should be applauded nevertheless.

It is the perpetual clock which provides the framework upon which the game operates, and it is here where *Shenmue* both excels and grates. Shops open and close as in the real world, buses run to timetables, appointments are arranged, and Ryo's mother will even reprimand him for returning home late. This is handled expertly and is without doubt the most innovative aspect of the title. Yet given that much of the game consists of being at certain locations at given times, there is not enough distraction in the *Shenmue* world to keep you engaged while waiting. Once the local town and the arcade centre have been explored there is little left to do except, bizarrely, look at your watch.



Ryo can learn a whole host of fighting moves which prove useful in the many brawls that seem to come his way. Extra moves and combos can be found on scrolls hidden around the game world

Subquests would have greatly enhanced the experience, providing a welcome way to occupy such dead time. The story, too, is very much on rails. Clues are unearthed in traditional RPG fashion by wandering around the streets and talking to anyone and everyone. Though the wonderful graphics and facial modelling have clearly added character to such proceedings, the usual stock repetition of replies and constant engagement in small talk will be familiar to anyone who has ever played an RPG.

Shenmue will not tax you cerebrally either – there are no puzzles to speak of; it is more a case of finding directions to the next clue. And if time ticks away while a clue is not being investigated you begin to feel the presence of father Suzuki holding your hand and guiding you in the form of a blatant cut-scene.

Shenmue is much more than an interactive movie, but certainly does not deliver the freedom expected. It's involving, and ultimately rewarding, but only represents a step towards what may be possible in the future, rather than the milestone **Edge** hoped for.

Edge rating: Eight out of ten

The Legend Of Zelda: Majora's Mask

















The voice acting in the *Shenmue* ranges from the sublime to the ridiculous. Tom (above) is a half American, half Jamaican hot dog vendor who unwittingly provides some of the more comic moments in the game

Earning your keep

One of the more enjoyable segments of the game sees Ryo get a job at the dockyards. Over a few days he must earn enough money to gain passage to Hong Kong, where the next chapter of Suzuki's epic will take place. Stacking crates may not seem like the most dynamic form of entertainment, but you begin to take real pride in the work. Forklift truck races take place every morning to take Ryo's mind off the despair he must be feeling over his father's murder.





The QuickTime action events (left) are integrated into the story particularly well. They are hardly sophisticated in terms of gameplay, but offer a change of pace from the main quest

The Legend Of Zelda: Majora's Mask

Format: **N64** Publisher: **Nintendo** Developer: **In-house** Price: **£45** Release: **Out now**

It would take a developer possessed of equal amounts temerity and talent to produce even a halfway-distinguished sequel to *Ocarina Of Time*, hailed by many – including **Edge** – as the Best Game Ever. Fortunately for those eager to revisit the world of Link, Nintendo has outdone itself and has managed to produce a game every bit as absorbing, atmospheric, and challenging as Miyamoto-san's

Nintendo has outdone itself and has produced a game every bit as absorbing, atmospheric, and challenging as Miyamoto's masterpiece









The different locations in the game are as meticulously detailed, visually stunning, naturalistic, and believable as those in *Ocarina Of Time*

masterpiece. What's even more surprising, though, is that Mario's dad had little direct input on the development of *Majora's Mask*; proof indeed, that, with or without the world's most admired game creative, Nintendo's in-house teams are stupendously talented in their own right.

Initial impressions of the game lean towards familiarity; the intuitive controls and play mechanics of its predecessor have been recycled, which is no bad thing. The Z-lock system remains, as does the assigning of inventory to the C-buttons, and the context-sensitive A-button. Elsewhere, the basic structure of the game revisits old territory, too, the meat of the game requiring the exploration and conquering of dungeons which are every bit as exquisitely designed and intricately detailed as before. Indeed, only one dungeon can be considered anything less than utterly joyful; the Zora Dungeon's reliance on tracing water-pipes and flicking switches means it is perhaps the equivalent of the first game's weak point, Jabu-Jabu's Belly.

The basics of the game aside, though, *Majora's Mask* is a very different proposition to what's gone before. There is once again a seamless, environmentally varied gameworld, but this is a darker, more textured adventure, and the attention to detail is even more astonishing. Much of this is due to the 72-hour time limit imposed on the player; within three days, the moon will crash into the world of Termina, by which time you need to have beaten the game. However, thanks again to some innovative use of the ocarina, various songs have a temporal effect; Link can slow down time,



Once again, boss confrontations prove to be epic experiences. Once Link has the Fierce Deity Mask – gained later in the game – he can transform into a giant anime-influenced version of his younger self

skip ahead through 12-hour periods, and even warp back to the first day.

And the point of all this? Clock Town, the central area of the game, is teeming with hundreds of different characters, all of whom have their own agenda, doling out errands and subquests as a result. Observing routines through the three-day period enables the player to record details in a notebook, so Link will know where people will be at a certain time. Such a concept allows for a breathtakingly non-linear experience, as quests from different characters intertwine physically and temporally over the three-day period. It is a remarkable achievement, even more so given that it works beautifully; the player will be forgiven for spending the bulk of their time in Clock Town rather than exploring the vast and, once again, beautifully rendered surroundings. Elsewhere, the use of masks is given greater credence than previously – four masks physically transform Link, bestowing remarkable abilities, and the 20 remaining masks all have a significant part to play, too.

Ultimately, then, *Majora's Mask* offers a far more intricate adventure than *Ocarina Of Time*. While that game remains the more 'epic' of the two, this stellar sequel astounds by offering something that is perhaps even more meticulously considered, well-designed, and genuinely exciting to play than its predecessor. That it is not as immediately jaw-dropping – thanks, in part, to initial familiarity – is perhaps its biggest failing.

Edge rating: Nine out of ten











Combat is once again superbly executed and highly enjoyable, via the handy Z-trigger lock-on



Majora's Mask excels – as did it's predecessor – by giving you all the tools you need but leaving you to find out how and when they need using. The Lens of Truth, for example, uncovers this huge Goron



The use of masks is wonderfully executed through the game; there is little that can challenge the sheer joy and freedom engendered by taking to the seas as a Zora

Changing the world

While even the tiniest part of *Majora's Mask* has been tweaked and refined to offer splendid gameplay, this sequel still astounds when it comes to impressive, larger-than-life set pieces. Perhaps the best example comes when the goat-like boss of Snowhead Dungeon is vanquished; the previously snowbound Goron Kingdom thaws, to reveal an achingly lovely summerland. Elsewhere, though, the discovery of the Gerudo Lagoon, enabled by donning the Zora Mask, and sluicing delightfully through the mind-bogglingly vast sea area, comes a close second.

Driver 2

Format: **PlayStation** Publisher: **Infogrames** Developer: **Reflections** Price: **£30** Release: **Out now**









There are several twoplayer games included. Capture the flag, racing to checkpoints, and cops 'n' robbers certainly extends the longevity of the title. The feeling of speed still remains sluggish

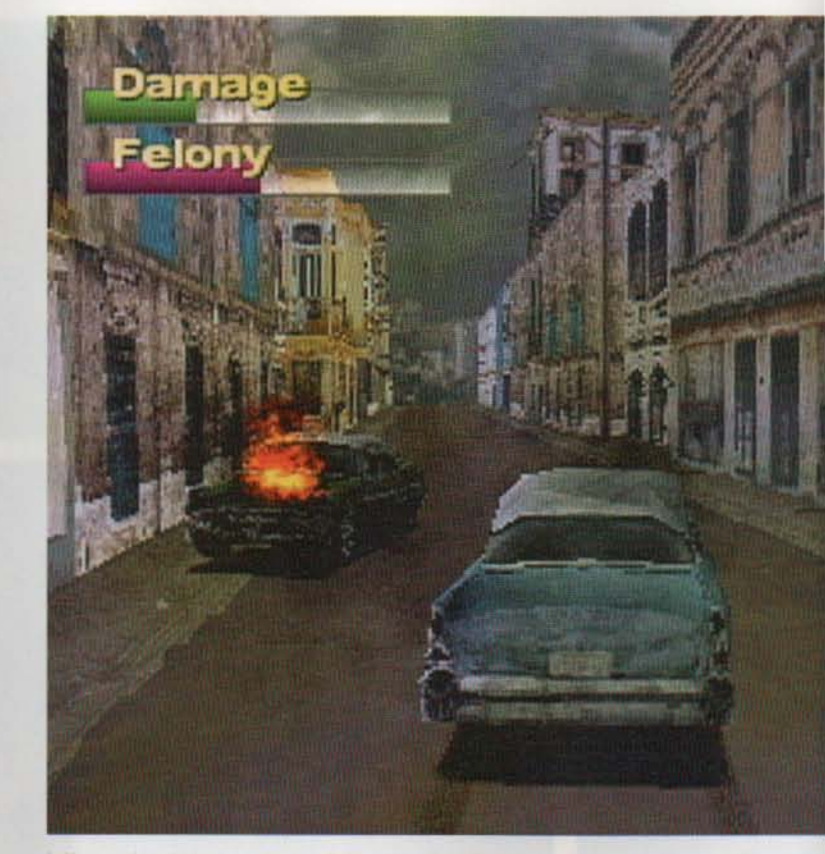
No doubt you've read reviews in other magazines and are wondering about the huge discrepancy between those scores and the rating at the foot of the page. This has happened before, of course, but **Edge** can't remember a title that has quite generated the sheer blind enthusiasm which has surrounded the release of *Driver 2*.

It comes as a huge disappointment, then, that after more than a year in development, *Driver*'s sequel proves to be inferior to its predecessor in nearly every department. The addition of curved roads, more vehicles, and an animated Tanner appear to have stretched the PlayStation further than it wanted to go, the result a piece of work that commits some of the most basic cardinal sins of game craft.

After sitting through the initial FMV sequence (which, incidentally, is better in quality than those delivered in the first game), Tanner is launched into the seedy underworld of Chicago. Early signs are not good. The most noticeable flaws become obvious as soon as you turn a corner and accelerate along one of the freeways in the Windy City. The sensation of speed is poorly conveyed: even at full speed the frame rate is particularly low, and weaving in and out of traffic is made ponderous by having to constantly overcompensate on the controls. Occasionally this improves slightly, but is clearly dependant upon how much is happening on-screen. Drive up one of the curved bypasses – an element introduced to better convey the sense of a real city's structure – and things begin to slow down severely. The effect at times can be reminiscent of swallowing a combat boost pill in *Perfect Dark*, only the time distortion here proves detrimental, not beneficial. Try controlling your vehicle in these conditions when being hotly pursued and the game quickly loses all its fun.

It comes as a huge disappointment that after more than a year in development, *Driver*'s sequel proves inferior to its predecessor

Pop-up, too, is also quite startling for a game produced towards the end of the PlayStation's reign. The draw distance seems to be set at about four car lengths ahead, and watching as office blocks and skyscrapers blink into existence can be a terrifying experience for all the wrong reasons. Travel down the freeways, and at times it seems as if you're about to drop off the edge of the world. Some of this could be forgivable if it didn't have such serious gameplay consequences, but in one mission Tanner must escape a warehouse complex, and the task is made considerably harder due to driving into cul-de-sacs which moments ago looked like open exits.



In Havana, the vehicle types alter to suit the surroundings. These '50s-style gas guzzlers can still prove nimble. Escaping the police by weaving in and out of traffic easily provides the most thrills in *Driver 2*

Yet, for all its inconsistencies, there is still a playable game here. It is a pity that the action begins in Chicago – the most complex in terms of scenery design – because in Havana, Rio, and Las Vegas the slowdown is less noticeable. The mission structure is more linear than in *Driver*, but this has provided the time to deliver more varied objectives. A to B driving is naturally the main focus, but there are other inventive assignments to perform. One of the more innovative includes stealing a reinforced bus to destroy a fleet of cars owned by a gangland boss.

Tanner's ability to exit his mode of transport does provide some extra gameplay possibilities. A severely damaged vehicle, for instance, can be exchanged for a new model, giving the player more of a chance of competing the mission successfully. Such opportunities, however, are underused. It's frustrating not being able to exit the car after being detected by police – surely one of the better ways of avoiding their attentions.

Whether through overambition or publisher pressure, *Driver 2* shows all the hallmarks of a game rushed out for that vital pre-holiday-period release. At £30 there are better ways to fill a stocking this Christmas.

Edge rating: Five out of ten













The scenery and effects in *Driver 2* can be impressive: watch as the sky deepens in colour and rain begins to fall during a drive. Some missions avoid the mundane, like jumping on to a departing ferry (top)



The eight vehicles of the original game are now 36. This adds a great deal of variety to the game, but puts the PS under considerable strain. Vehicle spooling combined with scenery layering proves too much





Mutton dressed as lamb

Apparently Ozwald Boateng designed Tanner's wardrobe. That's is all well and good, but the poorly animated creature in this game is hardly the best model for the threads. At best, commandeering vehicles can increase your chances of completing a mission, but in practice controlling Tanner can be a pig. In one mission he must arm three bombs and exit a door. While this sounds easy enough, it becomes seriously difficult given that while out of his car he can only weave from side to side like a drunken fool.

No One Lives Forever

Format: **PC** Publisher: **Fox Interactive** Developer: **Monolith** Price: **£30** Release: **Out now**









Many of the set pieces in the game, like the skydiving pursuit above, are more than worthy of any spy thriller, and they appear through the game with satisfying regularity

Any fresh forays into firstperson shooter territory will be judged according to the benchmarks set by *Deus Ex* and *Perfect Dark*. But while these titles raised the bar in terms of level design and gameplay, they did little to extend the genre's milieux beyond conventional dystopian sci-fi fare. The most notable feature of *No One Lives Forever* is, by contrast, its refreshingly colourful '60s setting. The sub-Austin Powers gags are regrettable, and while Monolith has had a good stab at emulating the better design features of leading FPSs, it ultimately falls short. But the varied environments and mission objectives, along with a substantial arsenal of eccentric gadgetry, contribute to a rewarding experience.

Despite its delusions of humour, the game proper owes plays more like a James Bond or Men From UNCLE escapade in the essential seriousness of the gameplay. This encompasses such staple espionage settings as Berlin nightspots, moving trains, snow-capped mountains, shark-infested shipwrecks, and the obligatory 'Moonraker'-esque space station. Each of these environments is used to add an element of variety to missions, peppering the game with memorable set pieces. From avoiding a ticket inspector by taking refuge in the lavatory, to navigating zero gravity access tubes or conducting a rooftop escape, the number of quality sequences puts many a cinematic spy thriller to shame.

Missions are interspersed with mini tutorials that introduce the heroine, Agent Cate Archer, to new or upgraded gadgetry in the relative safety of the Advanced Field Tactics area of UNITY HQ. The equipment on offer is impressive in its diversity, but also in its impact on the outcome of missions, with players able to tailor their arsenal before departing for the field. Lipsticks conceal highly dangerous explosives, while a hair clip can be used to pick locks or poison foes. Archer's sunglasses can be equipped with a zoom lens, or infrared functionality, enabling her to see hidden lasers and mines. There is

The most notable feature of *No One Lives Forever* is its refreshingly colourful '60s setting, but its sub-Austin Powers gags are regrettable

Alongside offing adversaries and avoiding detection, another factor that contributes towards successfully completing missions is locating clue-laden intelligence documents scattered through the levels

even a robotic pooch to distract guard dogs, and fluffy slippers to reduce the noise made while traversing clattery surfaces. But among the most important devices is the humble coin, which will be used to distract guard after guard throughout the course of the game.

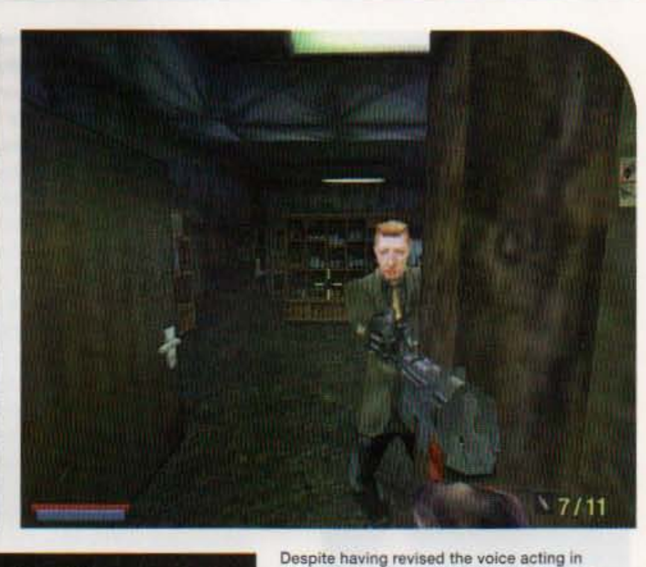
All of this is testament to some excellent AI. Characters in the game respond to a variety of stimuli, often in unpredictable ways – calling for help, or choosing to check out a disturbance alone. But the game's major flaw is that level design is frequently out of sync with these facets of enemy responsivity. Although missions are varied, all-out gun battles are rare, placing a huge importance on stealthy manoeuvring. However, unlike comparable titles, there is no lean function – a necessity when it comes to satisfactorily avoiding observant guards and an abundance of security cameras. The unpredictable responses of guards prevents a clear difficulty curve emerging, resulting in a stop-start rhythm that detracts from the game overall.

If the interminably long and frequently static cutscenes are skipped, the core gameplay at the heart of *No One Lives Forever* can be enjoyable and compelling, frequently encroaching on the truly inspired, but there are a number of design flaws which let it down badly. Still, by featuring some colourful locales, which are translated well into multiplayer arenas, it really does deserve to set an agenda of sorts for other developers thinking of adding to the genre.

Edge rating: Seven out of ten







Despite having revised the voice acting in the game following criticism from European journalists, Monolith still manages to incorporate some truly awful examples of the art













All-out firefights are few and far between, as the action is predicated more on stealth and tactics than no-holds-barred bloodletting. However, far from denying the player access to the death-dealing tools of the spy's trade, weapon and equipment selection is integral to achieving mission objectives

Archer's kit runs from the sublime, as characterised by glasses with in-built infrared detectors (above), to the ridiculous, such as slippers to creep around in

Character flaws

Fox has made a concerted attempt to establish the franchise potential of *No One Lives Forever* by endowing Cate Archer with a detailed background and by giving her – and indeed real-life alter ego Mitzi Martin – a high media profile, notably with appearances at ECTS. However, as Steven Poole has pointed out within these pages, it is difficult to imbue firstperson gameplay with a sense of character. Nowhere is this more apparent than in *NOLF*: with cutscenes begging to be skipped, Archer's character is never really fleshed out within the game.

Summoner

Format: **PS2 (reviewed), PC** Publisher: **THQ** Developer: **Volition** Price: **£45** Release: **Out now (US), February 2001 (UK)**







Magic spells are often dramatic, and using them at the right time is crucial. The active pause provides you with time in which to choose an appropriate rite from your book and target it effectively

S*ummoner* is a next-generation RPG. How does it qualify for this definition? Well, it's an RPG on next-generation hardware – one of the first to make its mark on Sony's new machine. One of its 'unique selling points' is also that it claims to showcase the capabilities of PS2 hardware. In this case, those capabilities seem to include horrendous pop-up, appalling loading times, and a laughably primitive structure.

The game works like something from the *Final Fantasy* series rendered in full 3D. Your character explores and fights his way around town and country, using a mixture of stealth, strategy, and outright violence to gain experience and recruit other party members. As the story progresses, members of your variously skilled group will be forced to leave only to return later, meaning balanced upgrading of each character's skill levels is necessary for success and further exploration.

The landscape is divided into towns, all accessed from a world map. Each town is subdivided into areas, the boundaries of which are marked by garish yellow lines, and between each area lies a 20-second loading time. That's fine for most places, since the areas are big enough to make the delays seem almost insignificant. When you're wandering across the world map, though, and the game throws you into facile area-based combat with what seems like every other step, the wait times bore and frustrate.

More frustrating, though, are the visuals. Beautiful in parts, they're made to look ridiculous by the shocking draw distance. Buildings rise 50 feet from your character's location, palaces appearing where previously there were open vistas. *Driver 2* is a good example of a gameplay mess created by aiming in excess of a console or team's capabilities; *Summoner* falls into the same trap, a generation higher. Here's a question **Edge** would like to see answered: if high-polygon scenery models can only be included to the detriment of the actual gaming experience, why bother to include them at all?

Beautiful in parts, the visuals are made to look ridiculous by the shocking draw distance – buildings rise 50 feet from where you stand



***Summoner*'s insistence on a restricted camera view is less important during combat. It's in the stealth and exploration moments that the inability to see further than just in front of your character really annoys**

The only concession to the paucity of vision is an occasional shift in camera view, pushing it up high when the action gets complicated. It's a painfully annoying fix to keep the frame rate high; the camera swishes around seamlessly, offering a beautifully smooth view, but what's the point when all it provides is a beautifully smooth view of the floor? It's difficult to plan attacks or stealth with any strategy when your party's outlook is limited to a *Gauntlet*-style radius.

Progression through the main mission means encountering various subquests, but this is no *Baldur's Gate*. Here the X-button is all-knowing, all-doing; find a new villager, press X, and he might give you a book. Find another villager, press X again, and your character could well hand the book over, having unwittingly completed a delivery subquest. There's no pleasure to be had, since absolutely zero thought is required, and though sometimes a reward comes in the form of bonus items or experience points, it all seems absolutely random and faintly pointless. Still, the uni-button motif carries a bonus. Thanks to the linearity and inherent simplicity, players who choose to skip through the generic D&D plot will find it little handicap to completing the game.

So, *Summoner* is a next-gen RPG with an overly simplistic nature, shrouded in an obscenely weak draw distance, and with loading times and random combat that shouldn't have made it past the 8bit era. The well-balanced skill and magic system, excellent party combat dynamic, and innovative dungeon design serve nothing more than to underline this as a missed opportunity. *Summoner* may well have a decent heart, but in the real world – as opposed to the fairytale universe the game inhabits – that isn't enough.

Edge rating: **Four out of ten**













Chain attacks, *Summoner*'s version of combos, are executed in rhythm-action style by pressing D-pad buttons as a chain symbol appears. Success will lead straight into another move



Making monsters

The summoning part of *Summoner* concerns the lead character – the gifted Joseph – and his ability to call a monster from the ether to aid him in his quest. By wearing any of the four available Khosani summoning rings Joseph can create one of 16 monsters, including wispy elementals and axe-wielding minotaurs, each with individual attacks and spells. Once created, the monster becomes a member of the player's party, and can be controlled as such. It's an excellent idea, and well executed, though somewhat dampened by the game's crippling flaws.



Summoning creatures to do your bidding provides a safer way of killing monsters from afar. Still, having all of your party attack at once is more effective, especially when enemies can only parry on one side at once

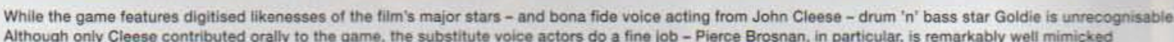


All *Summoner*'s cut-scenes utilise the game engine, giving a more coherent feel

The World Is Not Enough

Format: **N64** Publisher: **EA** Developer: **Eurocom** Price: **£40** Release: **December 8**




While the game features digitised likenesses of the film's major stars – and bona fide voice acting from John Cleese – drum 'n' bass star Goldie is unrecognisable. Although only Cleese contributed orally to the game, the substitute voice actors do a fine job – Pierce Brosnan, in particular, is remarkably well mimicked


Once again, the trusty sniper rifle returns, and here it is almost exactly identical to the pioneering weapon from *GoldenEye* – which is to say, it's a joy to kill with

To all intents and purposes, *The World Is Not Enough* is *GoldenEye* part two. Developer Eurocom has mimicked Rare's masterpiece, and has produced a game that, while delightful for those aching for more Bond adventures, lacks any real innovative elements.

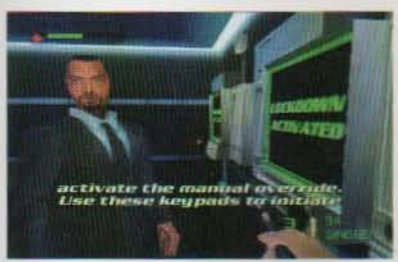
Which isn't to say it isn't any good. *TWINE* is often an excellent title, both technically and, more importantly, as far as enjoyment is concerned. Each of the 14 missions are subdivided into objectives, and, as Bond, there's the requisite plethora of weapons and gadgets to be utilised. Indeed, there's a far greater reliance on gadgetry here than in both *GoldenEye* and *Perfect Dark*; for instance, the X-ray scanner in *TWINE* is given far greater credence, and becomes far more essential, than the comparable gimmick in *Perfect Dark*. As a result, although *TWINE* obviously puts an emphasis on gunplay, there's more equipment to be used in the neutralising of enemies and completion of missions than simple guns.

However, whereas *GoldenEye* and *Perfect Dark* both set their mission objectives out at the beginning of a level – thus giving you the glorious chance to tackle each level as you wished – *TWINE*'s dynamic, on-the-fly objectives lend the game a certain rigidity. There's usually only one way to complete a given mission, as you're cannonballed from one objective to the next with little room for invention of improvisation. That said, the majority of missions here are still exciting and beautifully presented. Despite perhaps one too many levels relying on straightforward gunplay, there's plenty going on here. Particularly worthy of mention is 'Night Watch', a fantastically stealth-centric mission wherein no enemies whatsoever can be killed, and an extended two-level chase sequence sees the player running through the atmospheric streets of London and then into the Underground, complete with trains. The final level is ingenious, too, as the player must map a route through a submerged, water-logged submarine. It's only let down by the final confrontation, which, given the exhilarating chase through *GoldenEye*'s Cradle level, is remarkably anti-climactic.

As a oneplayer game, *TWINE* is an assured and modestly inventive affair (despite some sometimes questionable enemy AI), if one that is instantly familiar. While the game is perhaps indicative of the lack of originality in the games industry today, you have to withhold criticism when the end result is as polished as this. As good as this is, though – and it is generally very good – it pales into comparison with the bewilderingly comprehensive *Perfect Dark*, and feels lightweight when compared with *GoldenEye*. As an example, higher difficulty settings

While *TWINE* is perhaps indicative of a lack of originality in the industry, you have to withhold criticism when the end result is this polished









Remarkably expansive levels perhaps serve as *TWINE*'s signature. Admirably, Eurocom's custom-made engine remains constantly smooth, although things judder significantly when in high-resolution mode

in the game – while offering a different and more difficult challenge – fail to transform the game as radically as in the two aforementioned titles, where the actual style of play is altered. Multiplayer, too, suffers. While it's smooth and enjoyable, and the addition of competent bots is welcome, it adds nothing to the genre.

This is the main problem that *TWINE* faces. *GoldenEye* fans clamouring for more Bond will welcome the title with open arms, and while it is a highly enjoyable game, it offers less than other titles. Despite Eurocom's excellent custom-made game engine, which is both visually impressive and manages to maintain a respectable framerate (and is surely destined for future use on GameCube), *TWINE* ultimately falters against Rare's two-game sucker punch by failing to plough its own furrow through the FPS/spy-sim genre. As such, expect nothing particularly new here. Given that, though, *TWINE* still offers plenty of enjoyment for those who have exhausted Rare's masterpieces.

Edge rating: Seven out of ten



The London Underground level plays host to one of the more exciting missions in the game. You'll need to sneak behind a speeding Tube train to find a hidden door. Mind the gap, obviously

Shaky Bond bots fail to stir

The one area where *TWINE* offers more than *GoldenEye* is in multiplayer. Arguably, the simple arenas offered here don't live up to classics such as Facility and Bunker, but the addition of bots is a welcome one. Each bot – based on a Bond character, and incorporating several old favourites – is possessed of a 'personality' and differing stats, and will act accordingly. Christmas Jones, for example, is weak and will concentrate on collecting items, while Renard has 200 per cent health and will attack on sight. Unfortunately, they still lack the variety, complexity, and efficacy of the *Perfect Dark* bots.

Ready 2 Rumble: Round Two

Format: **Dreamcast** Publisher: **Sega** Developer: **Midway** Price: **£40** Release: **December**









Fighting styles vary dramatically between Michael Jackson's speedy jabs (top), and Rumbleman's lumbering swings (right). This makes for a varied boxing experience





Rumble pack

Perhaps the most easily accessible new feature is the three-tier rumble system. In the first game, players earned a letter from the word 'rumble' every time they put in a big, undefended blow. Once they'd collected the whole word, they could hit the triggers and prompt their onscreen character to go into a double-damage pummelling frenzy. In *R2R2*, however, you can build up the gauge three times, and hitting someone with a fully charged rumble meter will see them flying from the ring for an automatic, daft win. Boxing purists may not warm to this. ▪





Midway has seen fit to make its new characters even stranger than the old bunch. Freak E Deke (left) is the victim of a brain-scrambling lightning strike, while Robox (right) is a walking punch bag.

There's something going on in America. Finally, the country's embrace of violence has translated into some interesting fighting games. Two months ago came the blood-splattered, no-holds-barred carnage of *Ultimate Fighting Championship*, and now there's *Ready 2 Rumble Boxing: Round Two*; sequel, of course, to the early Dreamcast boxing hit.

As sequels go, this is of the 'smooth continuation' rather than 'radical overhaul' variety. The fighting engine's increased depth only becomes apparent after a couple of bouts and some determined experimentation with the unchanged button set-up (jabs and hooks assigned to the fire buttons, ducks and guards to the triggers). But soon, the greater number and wider diversity of combos, and the smoother, more accomplished animation become apparent. Fights are impressively realistic, with timing and movement proving as important as putting in the big punches.

Nevertheless, the big punches are where the fun is, and each character has his or her own arsenal, ranging from Michael Jackson's lightning-fast jabs, to Mama Tua's heavyweight haymakers. Wacko Jacko and Tua are just two of 13 new challengers; other notable additions are Afro Thunder's cousin, GC, a posturing early '80s soul boy in lace cravat, and white trash cowboy Wild 'Stubby' Corley.

As with the first game plenty of options are provided. You get a straightforward Arcade mode, a Championship mode (which enables you to train fighters through a series of minigames and then enter them in title and prizefights), a Team Battle mode, and an eightplayer Tournament mode. It's neat, entertaining selection.

Namco and Capcom probably won't be watching their backs just yet, though. The game lacks the pace and responsiveness of, say, *Capcom Vs SNK*, or the sheer complexity of *Soul Calibur*. Purists will also be miffed at the fact that you can now continue punching dazed opponents who are about to hit the deck anyway – although 'Rocky' fans will find this curiously stress-relieving. Whatever the case, most players will have to admit that the strange mix of unusual characters and convincing action work as well here as they did in the first title, it's just that now you get better visuals, more fighters, and a wider variety of boxing styles. All in all, an offbeat, unpretentious treat.

Edge rating: Seven out of ten

Sega Marine Fishing

Format: **Dreamcast** Publisher: **Sega** Developer: **In-house (Wow Entertainment)** Price: **¥5,800 (£37)** Release: **Out now (Japan) TBC (UK)**

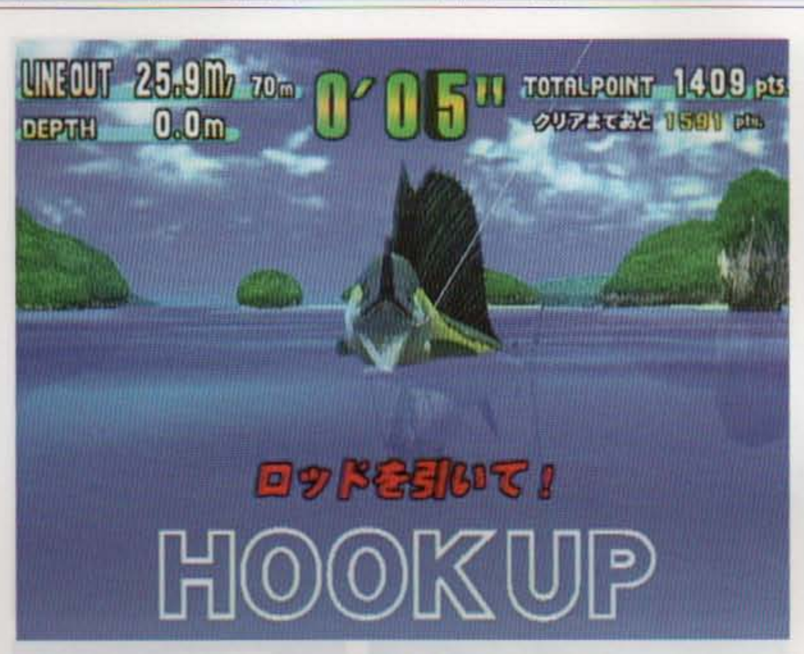
Owning a fishing game isn't immediately perceived as either cool or hip. But assuming you overcame peer pressure and the (erroneously) perceived humiliation of obtaining *Get Bass* complete with rod controller (hopefully Sega's own sublime design, rather than the disappointing thirdparty releases offered to the UK gaming public), you'll already know of its joys, either in oneplayer or as a bastardised multiplayer championship experience.

On paper, *Sega Marine Fishing* appears to offer little more than *Get Bass* other than a more varied selection of fish on the menu. The Arcade mode is included, giving you immediate access to three of the game's five fishing spots. Select this option to get the first indication that this sequel is not as delicately balanced as its predecessor. For instance, the time limit is sadistically strict – you're casting out in the region of 50 metres which, when combined with the more resilient nature of the various sea-dwellers you're attempting to lure back to your boat, makes it extremely difficult to bring in enough fish to progress to the next anchor point within the time allowed. Also, because of the wilder character of these sea swimmers, you'll notice the line tension varies wildly, swinging from hook-loosening slackness to line-snapping tautness in a fraction of a second – keeping it stable requires ridiculously sensitive reel work. Continues are infinite and a time limit increase option exists, but that isn't the point.

Oddly, there's no competition selection. The Original mode offers a line-up of training games, a free fishing option and, interestingly, an aquarium. Though initially empty, content for the latter is generated from sorties in the Free Fishing mode. This doesn't replace the tension felt when playing *Get Bass*'s competitions, of course, but it's a reasonably powerful incentive to keep coming back.

By and large, the fish are a lot more prepared to take a bite of your polygonal bait than before – possibly too eager. You could argue this redresses the balance somewhat, although it would seem preferable to have a harder time hooking fish and a more dynamic reeling-in sequence. Either way, this latest evolution is less intricate than its predecessor – for instance, water temperature and time of day don't even feature – and it's as if Sega has dumbed down the process a notch too far. The result is still good, it just isn't great.

Edge rating: Six out of ten





School of fishing

Original mode, which, in **Edge**'s opinion, fails to match *Get Bass*' simple yet highly addictive competition set up, does offer a Training mode for novice anglers. Within it you'll find five mini-games which include landing an increasingly difficult selection of fish, reeling in practice (points are awarded according to speed maintained), casting accuracy (balloons have to be burst with lure), a total weight event, and catching designated fish species. Records are kept to encourage competitive replayability.





Underwater environments are better rendered than in *Get Bass*, with whales and sunken WWII planes keeping you briefly occupied until something bites. Ultimately the fish are too easy to hook and too hard to land, and the game's balance suffers as a result







One of the attractions of *Marine Fishing* is the massive size of the water-dwelling entities that end up on your ship's deck (above), as well as the obvious diversity of gills that you get to rip to shreds

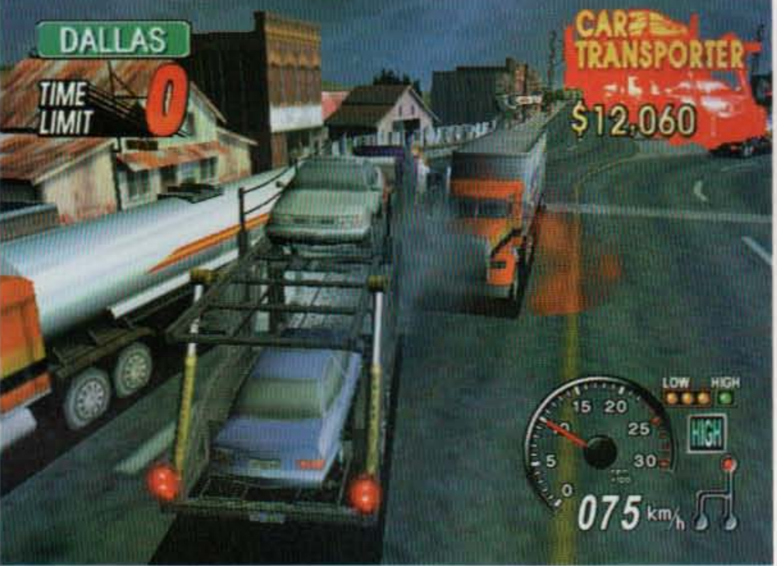
18 Wheeler American Pro Trucker

Format: **Dreamcast** Publisher: **Sega** Developer: **In-house (AM2)** Price: **¥5,800 (£37)** Release: **Out now (Japan) Q1 2001 (UK)**





Unexpected weather systems provide entertaining diversions in *18 Wheeler*. At one point a tornado (above) tears across the road, lifting cars and dumping them in your path









A relative portion of the offroad landscape is also open to a bit of reckless trucking (above). Careering along a mountain path before dropping into a precipice and plummeting down a rockface is great fun

Parking the rig

Of the limited extras included, the Parking mode gives the player a taste of the difficulties and dangers inherent in manoeuvring a 50-foot monster round urban back alleys and loading bays. Negotiating tight corners and narrow passages all require knowledge of an articulated vehicle, as this is no small task. Solid practice is the order of the day.

Sega, it seems, can be consistently relied upon to condense the ordinary, if not the mundane, into a riotous, macroscopic serving of arcade elan that no other manufacture can quite replicate. While its home-based format may be the underdog in an age of casual gaming, Sega is still a veritable force in the realm of the coin-op pound devourer. Ironically, it is exactly this strength that picks at the seams of the promising *18 Wheeler American Pro Trucker*.

Choosing from one of four truckers, each with varying abilities, the player's task is to ferry a number of loads from point to point within a particularly tight time limit. Naturally, there is a recognisable Sega slant on the proceedings, with numerous hazards standing in your way in the form of boulders, tornados, other vehicles, etc. Colliding with certain other road users awards bonus seconds, while the ever-present threat of a 'rival' trucker rears its head by way of the opposing rig sometimes blocking the route or simply attempting to run the player off the road entirely.

The soggy feel of the 18-wheeled lorries in question is accurately portrayed, with sluggish acceleration and overworked suspension all requiring careful accounting for. Approaching corners gingerly, or learning to ease the cab between two other vehicles, becomes imperative if victory is to be tasted.

Both gameplay and graphics sum up AM2's coin-op craftsmanship admirably. The interior view is particularly pleasing, with details such as sliding documents and aviator shades on the dashboard adding subtly to the experience, while suitable lighting and changeable weather contribute to the ever-shifting horizons of long-distance driving.

It is sad fact, then, that the home version suffers abjectly at the hands of a ruthlessly shallow replay quotient. Once the four stages of the Arcade mode have been conquered, there is very little to return for. The inclusion of a circuit-based Score Attack is token, while the Parking Challenge adds throwaway frivolity for a short while only. Given *Virtua Tennis*', or, indeed, *Crazy Taxi*'s cornucopic subgames, the lightweight nature of *18 Wheeler American Pro Trucker* falls into sudden and sharp relief. With rumours circulating regarding a fleshed-out version being specially developed for the US market, this would seem a missed opportunity to capitalise on what is otherwise a thoroughly enjoyable game.

Edge rating: Six out of ten

Gunlok

Format: **PC** Publisher: **Interplay** Developer: **Rebellion** Price: **£30** Release: **November**







Gunlok tries to tactically rich by offering a number of different approaches to a combat situation. Larger robots may be best dealt with by using a selection of explosives

The corporate machine

The enemies of Gunlok's gang are the corporate machines. This is another future where humanity's obsession with technology has brought their downfall. Surviving in this post-apocalyptic world could be the dream of everyone who's ever seen 'Terminator', but sadly, the capitalist-mechanoid chaps are never too challenging and far too undifferentiated to ever excite. Rebellion's imagination is still in evidence, though; the robots boast hearing and sight cones that enable you to plan your stealth as you creep past, or attack them accordingly.





Gunlok is the central character in the story, but he gathers a squad of other robots around him. Each has its own unique place in the squad, and has to be employed imaginatively for the most efficient results

Rebellion has broken out of its commercially successful franchise-based mindset and has clearly decided to attempt something a bit different. *Gunlok*'s mandate was to deliver an original title that mixed apocalyptic sci-fi, top-down squad management and strategy with beautifully angular anime-styled robots. This it has achieved, but despite this the game regularly fails to entertain.

It's obvious that the design team has had some fun here, at least; there's a wide raft of ideas on display, some generic and dull, others quite original, even spectacular. The levels carry a certain sense of atmosphere and are often gorgeously rendered, with excellent textures, but are ruined by poor animation and average lighting and weapon effects. As you whirl about in the 3D engine, even taking a firstperson perspective view at times, *Gunlok*'s potential becomes obvious. Unfortunately, it's potential that remains largely unfulfilled.

The structure is that of a mission-based squad management game. Each of the characters in the story has unique abilities and must be kept alive for the game to be completed. The plot and characterisation is nothing special, but may well have proved perfectly adequate for a more structured title. Whereas the characters almost benefit from the clichés that abound, the game as a whole tries to avoid genre classification and ends up suffering for it.

Rebellion has dragged in ideas from all over the gaming world in an attempt to make *Gunlok* into an adventure that would be as quirky and interesting as anything to date, but unlike rivals within its genre, boredom prevails. There's too much aimless wandering, too much time spent fiddling with the irritating and unintuitive camera controls, and nothing to distract you from the constant need to monitor the health and equipment levels of your squad of robots.

The title's real weakness, though, is in its decision to concentrate on being a puzzler rather than a shooter. The puzzles are seldom ingenious and usually serve to frustrate and annoy, and as such the game as a whole fails to win your respect. Similarly, the stealth and action moments lack inspiration. In fact, it's that lack of inspirational verve that leaves *Gunlok* so uselessly hamstrung. It's packed with great ideas, but there's no spark and no finesse.

Edge rating: Five out of ten

Insane

Format: PC Publisher: **Codemasters** Developer: **Invictus** Price: **£40** Release: **Out now**

Like the 8bit titles on which Codemasters' foundations were laid, the company's latest title, *Insane*, takes a simple idea to its gameplay limits. The player is provided with a vehicle, a completely open landscape, and a racing goal to accomplish before their multiplayer rivals. Though a bot-based oneplayer mode exists, it ranks more as training for the online contest that awaits those with a Net connection. This is, after all, the game that the publisher has chosen to launch its new crossformat online client, the Codemasters Multiplayer Network.

Initially, *Insane* fails to impress. The barren landscapes make for an immediately distinctive first impression, which sadly soon descends into bland monotony. Atypically for a racing game, there's nothing like a track here; the courses have more in common with the curved fractal landscapes of Frontier's *Infestation*. Terrain can be generated automatically, meaning that theoretically there's a near-infinite amount of courses to be negotiated. In practice, despite changes in hue and gradient, they're similar to play.

Thankfully, that gameplay constancy is made rewarding by the brilliance of the game's dynamics. *Insane*'s roots – in what used to be a physics demo which now forms the core of the game engine – are strikingly apparent throughout. The handling of each vehicle is superb, and each of the five classes shows a markedly different model, but it's the damage system that particularly impresses.

Heavy impacts on each vehicle result in the warping of its polygon model, so depending on the location of the collision the visuals respond accordingly. Wheels can become locked or detached, the engine damaged, and the whole chassis can be lifted and twisted around the internal framework. Again, though well executed, the destructive aesthetics fail to impress, but their effect on the handling is magnificent. Grow to know a car well and you'll know exactly where and how it's been damaged just by the way it responds as it navigates a hill.

While this is fun, it's far from perfect. As a oneplayer game *Insane* desperately lacks variation, and even in the multiplayer mode there's little of the aggression or teamwork that marks out something like *Counterstrike* as such a satisfying Net-play experience. Regardless, for Internet combatants anxious for an online fix that offers something a little different, *Insane* is passable.

Edge rating: Six out of ten

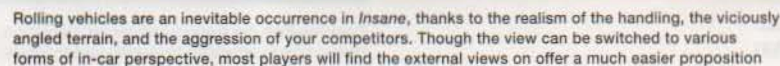











Rolling vehicles are an inevitable occurrence in *Insane*, thanks to the realism of the handling, the viciously angled terrain, and the aggression of your competitors. Though the view can be switched to various forms of in-car perspective, most players will find the external views on offer a much easier proposition



Race form

There are seven modes of play in *Insane*. Many are variations on a standard racing structure, with the goals being randomly scattered gates on each landscape. There's also a Destruction Derby game where points are scored for tumbling opponents and for managing to stay within an X-marked zone. The final two types are spins on the FPS favourite, capture the flag. In one of these, points are scored for every second of possession, but the flag increases in weight with time, and as your car slows, avoiding being stripped of it becomes increasingly difficult.

AquaAqua

Format: **PlayStation2** Publisher: **SCi** Developer: **ZedTwo** Price: **£25** Release: **Out now**





Gigantic level-levelling monsters arrive every so often to disrupt your building plans. Failure to score enough points within a time limit means destruction



The block's shadow, along with a grid system new to this version of the game, helps you to place your fast-descending blocks in the right place. Leaving even the smallest gap will mean the end of the game

Nominally, this is the sequel to *Wetrix*, but while the name has changed, the game remains almost the same. For those unaware of the splashy puzzler's structure, blocks fall onto an isometric playing surface, and the player must arrange them to form craters in which to catch an impending downpour. If you fail to make their craters wide or deep enough, the water will crash off the edge and vaporise into clouds of hissing steam; if too much water escapes, the game ends.

There are complications, naturally. Ice cubes and bombs rain from above, and if you build too high, an earthquake will shatter your construction. In Story mode, failure to score a certain amount of points within a set time limit carries its own punishment in the form of visiting destructive space demons.

All neat diversions, certainly, but hardly a radical shift in emphasis, though since this is the game's first outing on a Sony-branded console it is forgivable. Oneplayer is addictive, twoplayer even more so, and though it's difficult to imagine anyone who owns *Wetrix* on other machines purchasing what's little more than an upgrade, *AquaAqua* will hugely entertain those new to its damp dynamic.

Edge rating: Seven out of ten

Incredible Crisis

Format: **PlayStation** Publisher: **Virgin** Developer: **Polygon Magic Inc** Price: **£30** Release: **November 3**

The multiplayer multi-minigame *Bishi Bashi Special* was a surprise success, so it follows that there may exist a market in a similar vein for the lonelier gamer. *Incredible Crisis* takes up the idea and smothers it in Japanese logic, confused film references, and an oddly coherent plot centring on a family gathering.

The game begins with Taneo, a middle-aged Japanese businessman, making his hazardous journey to a party. Every step closer brings another obstacle, each taking the form of Game & Watch-style minigames that must be completed to continue. Eventually Taneo arrives home, and the game restarts with another family member and another set of games.

The story is well woven, but only begins to make sense once you've seen it from each of the four perspectives. The problem isn't the inherent weirdness, but the games themselves. Even though there are 25 levels, many are weak, several are near-identical, and few come close to the combination of style and substance exhibited in the first, which has Taneo indulging in a rhythm-action workout. A shame, because the design deserves more than to be backed up by what's a hollow play experience.

Edge rating: Four out of ten





The ferris wheel (top) disguises an odd massage game – one of the highlights here, and far better than the horrible Snowboarding With Wolves (above)



Escaping from the spider's web means stopping a pointer on the green mark. Fail, and the player has a limited time to rebalance before the spider arrives. It's mildly diverting, but near-identical to an earlier level

RC de GO!

Format: **PlayStation** Publisher: **Acclaim** Developer: **Taito** Price: **£35** Release: **Out now**

Although it initially comes across as one long advert for Japanese model car specialist Kyosho, the latest in the *de GO!* series actually focuses on the fun and frantic world of radio-controlled car racing.

Championship mode is split into six on-road races and their off-road equivalents, before access to the final two Tarmac stages is allowed. Along the way you earn money to buy upgrades, meaning that within a couple of meetings your car will be whizzing around the track with all of the agility and velocity associated with miniature nitro-powered RC vehicles.

The racing soon gets ridiculously quick, and the car's responsiveness leaves little option but to memorise the courses and anticipate corners that have yet to appear on screen. This is by no means a problem, more a throwback to old-school mechanics.

The game could, however, be better balanced – it's possible to go off-roading with road tyres and suspension settings and still win with little trouble. Despite Training and Time Attack options, the average gamer should complete the whole thing within two days – without a twoplayer option there's not much here to keep you coming back in the long run.

Edge rating: Five out of ten



Off-road racing is also catered for, though it must be noted that of the two racing categories offered, this is not the one at which the game excels. As long as your car isn't too powerful it's still reasonably fun





As you get deeper into the game, circuit complexity increases and new body shells turn up, such as a train, an ambulance, and a tank (above), to name but three

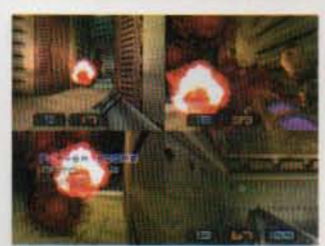
Quake III Arena

Format: **Dreamcast** Publisher: **Sega** Developer: **id (converted by Raster)** Price: **£40** Release: **December 8**



With the exception of the super shotgun, Raster has retained all the requisite weaponry from the PC incarnation of *Quake III Arena*. The lightning gun is a potent, yet hard-to-use and ammo-hungry device





Textures and lighting effects are excellent, with muzzle flare and rocket splash being particularly effective. Multiplayer bouts offer original, Dreamcast-specific arenas

Raster has done a laudable job here, successfully porting id's golden formula sans any ugly artefacts typically associated with such experiments. A solid framerate has been retained, irrespective of player count. Favourable comparison can also be made graphically, as there is trivial loss in texture quality, the visual solidity unaffected by player speed, a quality that is entirely as fast as is necessary.

More important than a striking face, however, is an unfussy, yet engaging pitch that offers gaming kill thrills by the ton. The raw, intense persona of *Quake* has been preserved for its console incarnation, and with four-way splitscreen included, the opportunity for domestic violence has an instant appeal surpassing Net play. That said, Sega has come good in its promises of online gaming, *Quake III Arena* performing in lively fashion, albeit limited to four participants.

With platform-specific arenas and mouse/keyboard compatibility, such an exemplary conversion throws the relative dryness of *TimeSplitters* into sharp relief. While a written favourite for Dreamcast owners, there is every chance that the casual gamer will succumb to such a killer app, given the requisite exposure.

Edge rating: Eight out of ten

Tomb Raider Chronicles

Format: **PlayStation, Dreamcast, PC** Publisher: **Eidos** Developer: **Core Design** Price: **£40 (DC) £30 (PS, PC)** Release: **November 16**





Given the dispersion of *Tomb Raider Chronicles* over four segments, it's unsurprising that Core has opted to clad its star in a variety of new outfits



Certain elements in the game, including the terrain and weather, are perfectly acceptable. However, the same cannot be said of some of the character models or their animations, which can be extremely poor

A yuletide episode of *Tomb Raider* seems to be a given in Eidos' annual calendar, and is certainly carved in stone as far as retailers are concerned. This year's offering, *Chronicles*, sets up a series of four separate adventures through the reminiscing of Lara's former friends, following her demise in *Tomb Raider IV*.

Unfortunately, *Chronicles* is weak, even when taking its undemanding fanbase into account. There is little to shout about visually, flat textures and turgid animation only serving to remind just how old the series is. Vast tracts of empty landscape remain a staple ingredient, and mission and level design are both predictable, with Lara exploring ruins in search of ancient articles and the like. The token addition of new skins and equipment may point to new experiences, but even the most casual of gamer would be hard pushed to see advancement in such a lazy title.

The twin efforts of Core and Eidos to further extract revenue from the *Tomb Raider* franchise will continue as long as undiscerning gamers are prepared to update their collections. Despite the promise of a total overhaul for PS2, *Tomb Raider Chronicles* is still mediocrity incarnate.

Edge rating: Four out of ten

Dead Or Alive 2

Format: **PlayStation2** Publisher: **SCEE** Developer: **Tecmo (Team Ninja)** Price: **£40** Release: **December 15**

More than likely, it won't come as an enormous shock to you to learn that this 'hardcore' version plays like the original *DOA2*. Within it, you'll find 12 play modes (Story, Time Attack, Versus, Fourplayer Tag Battle, Survival, Team Battle, Sparring Training, and Watch – useful for discovering new moves), a screenshot gallery, a battle rating system, four new tag battle arenas, hidden characters, many new costumes, an improved repertoire of tag team moves, and new cut-scenes for the Story mode.

Technically, it's reassuring to find a full-screen 60Hz option is offered for owners of compatible televisions, and while the lighting and character imaging have allegedly been reworked, **Edge** still found the overall jagged look less appealing than the smooth lines evident in DC *Dead Or Alive 2* (the 'hardcore' version on DC now looks unlikely to be released outside Japan, however).

So, the title has gained a few bells and whistles, but, importantly, the strong playability of the original hasn't been touched, meaning the wonderfully fluid and seamless action has been retained. As such this remains **Edge**'s favourite PS2 brawler to date.

Edge rating: Eight out of ten





The PAL 50Hz version suffers from considerable letterboxing (above), but at least speed isn't affected. Other shots come from the 60Hz full screen mode



Cosmetic improvements include lighting and slight character detail enhancements, though you'll be hard pushed to notice them in-game. Regardless, this continues to be one of the finest beat 'em ups around

Checking the small print online

Gamesbiz.net offers developers specialist legal assistance and business development advice

Paul Gardner, founder, Gamesbiz.net

gamesbiz.net







A secondary area of the site contains contact details for a variety of useful service providers to the games industry



At the heart of gamesbiz.net is the commercial and regulatory assistance area, where legal documentation can be downloaded

URL
www.gamesbiz.net

You'd think representing Robert Maxwell's Mirrorsoft in the legal minefield that was *Tetris* would have put **Paul Gardner** off interactive entertainment law forever. Instead, it spurred him onwards. "It was a fairly steep learning curve for me," he recalls. "The whole thing was a nightmare, but very interesting."

After *Tetris*, Gardner remained working with Mirrorsoft until Maxwell's mysterious demise resulted in the winding up of his companies. By that time, however, the games bug had bitten him: "I got a taste for the industry and some contacts, and there weren't many lawyers who knew much about the industry. I wanted to grow something from there, so that's where it started. Gamesbiz.net is the fulfilment of a dream I had back then."

Ten years later, and now a partner specialising in interactive entertainment at top legal adviser Osborne Clarke OWA, Gardner's dream has gone live on the Internet. Gamesbiz.net is the business resource for the UK games industry; the principle behind it is simple.

"Most of the new work we get arises from problems," he says. "And 99 times out of 100, those problems could have been either avoided or solved very easily, very cheaply way back when. The thing we have been wrestling with is how do we get in then and not when the problem arises."

As part of a fairly immature industry, certainly from a business point of view, lawyers don't rank high on the shopping list of most developers. However, what is surprising is how low they actually do rank. While the big publishers will bring their own high-powered law team to any publishing deal, most developers don't take any proper legal representation. As Gardner himself puts it: "Some guy down the pub who has done someone's divorce is probably not the person to choose to do your next publishing agreement."



As well as being a great resource, gamesbiz.net boasts an interesting design aesthetic

As he is keen to point out, it is rarely a case of the big bad publisher screwing the small naive developer. "People will try and get the best deal they can," he says. "I don't see it as evil publishers out to kill developers, because most publishers have been bitten pretty hard by developers going under or running off with the money. They've seen bad times as well." Nevertheless, both parties need to sure that they understand and are happy with the small print of any documentation they sign, and with the big companies having their own in-house lawyers and documentation, it's up to the start-ups to ensure they aren't rolled over.

This is one of areas in which gamesbiz.net can help. The main section of the Web site allows companies to download standard legal documents and checklists so they can look consider the implications of anything they are being asked to sign, before asking for legal advice. While it costs money to gain this access, as Gardner points out, with the hourly rate of even legal assistants around £175 an hour, anything developers can do to reduce costs is bound to be helpful.

Law isn't just about litigation, though; increasingly it is about business development. "If you look at any company in the industry, where's the value in that company?" asks Gardner. "An investor looking at a developer will say, 'Okay, the value is probably in the group of people, it's in the intellectual property that it owns. Does it have rights on an engine? Any rights on names?' It's contractual relationships that carry the benefits and the value. It's key to get those right."

It's for that reason that gamesbiz.net is more than a legal resource. Working closely with venture capitalist Livingstone Guarantee and business analyst Durlacher, the amount of information carried on the site is set to grow. "We'll try and make it a cornerstone for the UK industry in terms of a business resource," he explains. "We're not there to provide game news or ecommerce, it's just business, across the whole range of business."

The response has already been favourable, with registrations coming in from Russia to California. "I think it's a small thing we can do to try and help the industry grow and mature. I get satisfaction from helping developers grow and develop as companies," Gardner says. "To be honest, I don't get a huge amount of satisfaction doing litigation."

Gamesbiz.netters

Osborne Clarke OWA's interactive entertainment client list reads like a who's who of the UK industry. Work includes establishing an accreditation system for CD-ROM duplicators in the electronic entertainment industry for ELSPA, advising Codemasters in connection with intellectual property regarding football games, its acquisition of Sensible Software, and on a publishing and development agreement with Red Lemon. The company is also representing EA in connection with its move to new European headquarters. Recently, it also represented the ex-Sony Cambridge start-up Just Add Monsters, which was bought by Argonaut.

PS2 gets back to BASIC

Sony plans to introduce a new generation to programming through Yabasic

Mike Dean, Yabasic team leader



SONY Yabasic



Strangely familiar, this spinning letter has a magnetic quality that draws all towards it

Shown in its default blue and white, there are more garish colour schemes

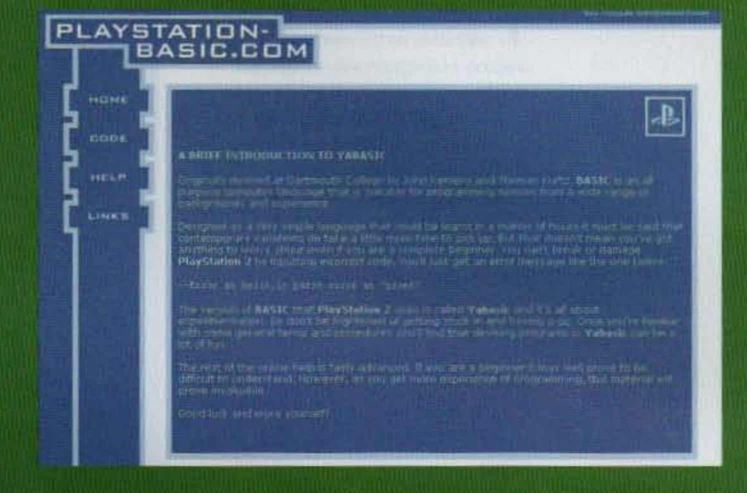
URL
www.playstation-basic.com
www.yabasic.de

The overall concept is far-fetched in the extreme. Take the computational power of PlayStation2, add the equivalent of 'my first programming language', and place the combination in the hands of an eight year old. But, amazingly, that's what Sony intends to do.

"Most of the people who are into games programming now grew up on Commodores, BBCs, and Spectrums. Their way into programming was through simple BASIC languages that came free with the machine," explains **Mike Dean**, nominally a SCEE software engineer, but who has been team leader behind the Yabasic project for the past three months.

And while Sony has experience in this area, thanks to the PlayStation Net Yaroze (see 'Generation Y', p60), that was designed for those with a working knowledge of C and required a PC. Yabasic, however, is designed for everyone. "We wanted to find a way that the next generation could discover programming for themselves," says Dean.

Backed by a couple of enthusiastic former-eight-year-old programmers, Dean approached **Mike Kavallierou**, his boss at Sony, and proposed bundling a simple programming language with PlayStation2. Although initially dubious that it could be completed in time, Kavallierou agreed. The next step was to find an appropriate language for the project.



"Yabasic was an open source application that had been written for *Unix* and *Windows*, and being open source it had been contributed to by lots of different coders. It was a great model to use for the PlayStation2 version," says Dean.

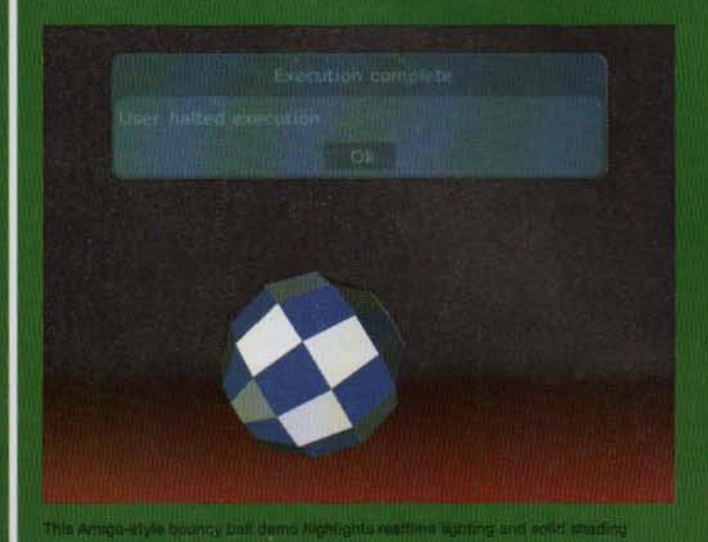
Standing for Yet Another Basic, Yabasic was the product of a German PhD thesis. Sony approached the author, asking for permission to port the code to PlayStation2. He agreed. "He shared the aspirations of the team and recognises that it's difficult for people to get into programming now," Kavallierou explains. "That's why he made it in the first place."

Then the hard work started. On the PlayStation2 side, an html viewer and text editor were written, as was code to handle USB input. While it is possible to program using a DualShock controller and the software keyboard, this was obviously frustrating, so one of the key areas was to enable the use of any USB keyboard.

"Hopefully we can use the USB code for showing developers how to deal with USB for PS2," comments Kavallierou, who got involved himself with some DualShock code and a sound effect – a single beep. Dean wrote a language interpreter to port the *Linux* code and tie all the PS2 code together. The result is the Yabasic programming language for PlayStation2 that will be found on the demo disc that comes with every European-territory console.

Sony has been careful to keep its proprietary code away from the open source parts of Yabasic, but, in keeping with the open source philosophy that gave birth to the project, it will be releasing all the improvements to the source code back onto the Yabasic Web site. Not a particularly renowned open source project, Dean jokes that after November 24, 'it may become much more well known when it gets several million more users'.

The package comes complete with a tutorial that explains programming from first principles, and source code that can be cut and pasted to aid the first steps of the programmers of the future. Sample code includes a spinning 3D object akin to the Amiga's infamous red-and-white ball, and a neat particle demo. There will also be a Web site with in-depth guides and more sample code. But, as Dean cautions, while you will be able to use the power of PS2's graphics synthesiser to draw triangles quickly, Yabasic remains BASIC. "People won't be able to make multi-level 3D dungeons with Yabasic. It's designed to open a path that hasn't been there for ten years," he says.



This Amiga-style bouncy ball demo highlights realtime lighting and solid shading

GameLive goes online

Java-based Web games are going massive with GameLive



Paul Smyth, marketing and business development manager, GameLoft

The convergence of gaming platforms via the Internet is creating a big opportunity for amateur developers; at least that's the message from GameLoft, the Web community for gamers set up by ambitious French publisher Ubi Soft. With localised content sites planned for some 15 countries by the end of 2000, the operation is certainly well on the way to setting up a global network. However, as **Paul Smyth**, GameLoft's UK business development manager points out: "Online gaming isn't just about providing a means to tap into the retail multiplayer *Quake*-type games."

Within the usual channels of news, views, and online game hosting is GameLive. Dedicated to straightforward, no-nonsense Web-based gaming, the site already has links to more than 650 titles. "We are looking to energise the gaming industry by bringing together enthusiasts and seasoned game developers," explains Smyth. "The community is based on sharing resources, experiences, and ideas. What we want is to bolster the ingenuity of the gamers. GameLive hosts the most engaging Web-based games that have been generated not only from within the company, but from within the community."

Free to play, easy to understand, and not as drawn out as other varieties of videogame can be, Web-based games are one of the big growth areas of online entertainment, although not one that is generally recognised as a traditional part of gaming. As more devices come equipped with browsers – the PlayStation2 and X-Box, for example – this looks likely to continue to be a growth area. "What is crucial is innovation, creativity, and pushing the limits. We won't to be taking on run-of-the-mill games," warns Smyth. "We want games with a 'wow' factor."



The most prominent of GameLive's content is the Danish-developed strategy game, Hexadome

The majority of GameLoft's 70-strong development staff are based in Canada, but in order for GameLive to really take off, it is relying on the creative potential of the games community. Onsite, there is a form which people can fill out describing any ideas for games they have had. "I am very keen to offer amateur and semi-professional creators as much help as I can," says Smyth. GameLoft recently sponsored the inaugural Games Development Awards, which was entered by more than 230 teams.

GameLive's preference is for Java-based games, which is an obvious choice when you consider the cross-platform potential of the language. "Gaming is headed towards full-scale convergence, from PC, Mac, and all the way to PDAs, WAP, and SMS, so if we can prepare games for easy conversion, we'll have a great deal of scope to diversify," says Smyth.

Interestingly, the Ubi Soft connection also gives GameLive a potential link to newly launched WAP gaming portal www.ludiwap.co.uk, which has also been set up under the auspices of the French publisher's new media expansion programme. Currently developed using WML, the push in this area is for XML content, although GameLive has no plans to move into this at the present time. But as the Web site entry form makes clear, GameLive is happy to get involved at any stage of a Web game's development, from someone who has a great idea but has no coding experience, to experienced teams who have completed content and are now looking for a publisher.

It's even possible that GameLive will fund development. "There are number of ways of working from commissioning game development to organising licensing and distribution," Smyth explains. "It could even be a case of working on advertising revenue." Considering the potential reach of GameLoft, that could add up to a substantial amount of revenue for the people who manage to generate concepts that Web gamers feel drawn towards.





Part of Ubi Soft's GameLoft web community, GameLive is a channel for innovative web-based game development

URL
www.gameloft.co.uk

Hexadome

The jewel in GameLive's crown at the moment is *Hexadome*. A title developed by a two-man Danish team, who work under the name Niemo Entertainment, it's a 2D multiplayer strategy game. The clever bit is that the client-side software is written in Java, and as a result there is no installation process. Players download the game every time they want to play. This means that people can play from any browser-enabled device that runs Java and the developer can release code updates whenever it likes without worrying about incompatibility issues.

And as for releasing *Hexadome* through GameLive, Niemo explains: "What we're looking for in a business partner is not a publisher but a host. As a host, GameLoft has the unique property of being a spin-off of a well-established software house. Finally, the fact that we can preserve and even promote our brand name through our co-operation with GameLoft is quite unique. Getting credit for the work you do is really what makes you care about it in the end."

Rebuilding the Studio

Largescale sweep and attention to detail define latest *Character Studio*



Keith Russell, European animation business manager, Discreet



Character Studio version 3 includes some new tools to help handle the interaction of individuals and larger groups, or delegates, as they're known

URL
www.discreet.com

With high-performance next-generation consoles forcing developers to create more sophisticated content, the battle between the various 3D and animation packages has rarely been hotter. But before Discreet releases details of the next major update to industry-standard *3D Studio Max*, the latest version of the accompanying animation package – *Character Studio version 3* – continues to blur the difference between game and movie content.

"Characters that move well are essential," says **Keith Russell**, Discreet's European animation business manager. "Our focus is on delivering those tools to make it possible." Predictably, the latest version of *Character Studio* incorporates the complete set of buzzwords such as non-linear animation, crowd and behavioural animation, and inverse kinematics.

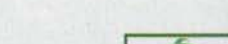
One of the most interesting developments is the introduction of the crowd toolset. Designed to facilitate the animation of large groups of creatures, known as delegates, it enables artists to animate individuals as well as, and within, large groups. "You can assign behaviours to a delegate or delegates, and *Character Studio* solves the movements and the inter-relationships," explains Russell. 'Associated with crowd' is a new behavioural system, which enables interaction between single characters and the delegates within a scene. "This means, for example, that a character can be asked to seek the door while avoiding the other delegates," Russell says.

Animation using inverse kinematics has also been upgraded, with up to six pivot points selectable on a character's hands and feet. "The difference is that now you can animate the position of the pivot point during the walk cycle, so it moves from the heel, to the ball to the toe of the foot, giving a hyper-realistic foot movement," explains Russell. Support is being extended to all forms of animation technique from motion capture to key framing.

Development for PlayStation2 and X-Box is also finally pushing developers to use higher order surfaces such as NURBS and bezier curve, which require more processing. With this in mind, *Character Studio 3*'s physique skinning application has been significantly optimised for use with the multi-processors that are being used. "Physique is multi-threaded, therefore the calculations of the skin deformations happen as fast as possible," Russell says. "Our tests indicate improvements of up to 20 times in some cases." Also thrown in to help animators are an improved workflow system and an expansion of MAXscript.

Stream to play

Superfast downloading with no installation process is Streaming Theory's promise


Steig Westerberg, Stream Theory's CEO





The 'Stream It' button is only piece of Stream Theory branding visible on a Web site using the technology





Deus Ex is currently one of more than 200 game demos available to play

URL
www.streamtheory.com

With the broadband revolution rapidly gaining hold, the advantages of edistribution are becoming increasingly apparent. One US start-up pushing the envelope is Stream Theory; its mission to directly stream game content over broadband networks.

"We are securely and efficiently delivering software applications over a variety of platforms," explains Stream Theory's CEO **Steig Westerberg**. "From PCs to gaming platforms, set-top boxes and wireless devices, our goal is for users to experience the full features of software without the constraints of conventional delivery methods."

Launched a mere month ago, initially on two Web sites with ten demos, the service has experienced 12,000 downloads and spread to six Web sites, including CNET Gamecenter and Adrenaline Vault. More than 200 demos are now available, ranging from *Deux Ex* to *Star Trek: Voyager – Elite Force*, *Soldier Of Fortune*, and *Hitman*. Infogrames has also signed up, the first publisher to do so, closely followed by Interplay and Eidos.

The speed of growth is partly down to the ease of the service. Once signed up, all a Web site requires is a 'Stream It' button and some additional html code. Stream Theory hosts the content on its servers and no additional code is added to the content



Currently being used on GamePro's Web site, this is what you see when streaming content at 605Kb/s

to be streamed. On the consumer side, anyone with a T1, cable modem, or DSL connection can use the service. The first time you click on a 'Stream It' button, a 1.8Mb Stream Theory player will download and install onto the PC. All streamed content loads on to the player from the server, but needn't be installed onto the host PC. This removes the need for users to install, obviously, or require patches.

"We completely change why and how software files are delivered," says Westerberg. "Much like console videogames, we make software work in a PC at a push of a button, without requiring massive downloads or cumbersome installation. It's clever because we make it so simple for the user."

Currently Stream Theory is only being used to distribute game demos. For example, Gamestop.com is providing streaming demos for pre-purchase sampling, backed up by the traditional boxed copy ecommerce model. Technologically, though, there is no reason why it shouldn't be used for full ecommerce and distribution. But as Westerberg himself tactically admits:



"Stream Theory will be announcing new programs that include streaming full programs at time of purchase, allowing instant ownership while the packaged product is being shipped to the customer's home." How confident gamers will be about buying games that are not 'properly' installed on their hard disks will be a big issue. It's with this problem in mind that games rental is also being pushed as a viable area for the service.

However, as Westerberg points out: "Our success is tied to how well we deliver software files for publishers, etailers, and portals as they strive to sell or rent software and add stickiness to their sites." Stream Theory provides the technology. It will be up to the industry to decide exactly how it wants to use it.



Stream Theory is attempting to make PC gaming experiences, such as Activision's *Star Trek: Voyager – Elite Force*, more akin to their console counterparts in terms of accessibility

Elixir diary: part 24

Republic: The Revolution **approaches First Playable status**

Elixir diary, part 24
by designer Joe McDonaugh







Generating the ever-changing sky in *Republic: The Revolution* is a daunting task, and is currently the preserve of new Elixir recruit Dom Penfold

New team members often produce spectacular results in a very short space of time. We've added another two graphics programmers to our graphics engine team, and they've both added some really cool stuff already. **Dom Penfold** comes to us from Cambridge University and Alan Murta joins us from Manchester University, where he was a lecturer in the computer science department. Over the next few diaries I'm going to introduce other members of the team and let them discuss aspects of their job to give a better insight into the different roles at Elixir. Here Dom talks about his work on the Totality Engine:

"My first job has been to work on the sky for *Republic: The Revolution*. The sky is one of the most complicated parts of the effects for a number of reasons. Firstly each day in *Republic: The Revolution* is going to move from black at midnight, to sunrise around 6am, to midday sun, followed by sunset around 9pm, and back to black for midnight. The sky has to move between these different states in a smooth way so that the player hardly notices it is happening.

"As if this isn't difficult enough, the sky also has to support different types of weather, from full blue sky, to wispy cirrus clouds, to completely overcast conditions. The weather will also be changing gradually from day to day, and once again the sky has to react smoothly to the changes. It's no good having blue sky at noon, and an overcast sky one minute later. To further complicate matters, I'm only allowed to use from 20 to 40 per cent of the processor and graphics resources, and everything is meant to look good as well.

"To start with I separated the sky into a number of basic components, namely the background sky gradient, the clouds, the sun, the moon, and the stars. The sky gradient was first on my list, and proved to be quite a tricky job. The basic blue sky is not that difficult: white at the horizon, blue above, and a bit of glow around the sun. However, sunsets complicate things quite a bit. Firstly, the sky has to appear redder at the horizon and this redness also has to be brighter near the sun. On the opposite side of the sky the horizon will be a much darker colour, almost brown. Once the sun has set, things go pretty much black, although a full moon will sometimes introduce blueness.

"To achieve these effects I've programmed a physically accurate model of the sky. This means that the colour gradients at sunset and sunrise are calculated using Rayleigh scattering. Corners have been cut, but on the whole the model produces fairly accurate colour gradients.

"Next on the list was the sun, and this is a relatively simple part of the sky. The sun is basically a disc with a slight lens flare. I've tried to steer away from the traditional 'lots of circles' approach, although I may go back to that over the next couple of months. Because the sun has to be visible as a disc at sunset, the flare increases as the sun climbs.

"One of the coolest features comes from the fact that I'm using a piece of code written by Alan Murta that positions all the major astronomical bodies correctly. It really is quite magical, because it means that the sun will travel along exactly the correct path as it would were you in Azerbaijan, the country closest to where the fictional country of Novistrana would be were it located in the real world. When you look at the sky, the stars will be rotating round the Pole Star, exactly as if you were standing in Baku at night.

"The remaining parts of the sky are the clouds and these have to change in realtime, so the code to calculate them has been fairly heavily optimized. As you can see from the screenshots, they look quite good although they're a little flat.

"The majority of the programming is now complete for the sky, and for the last few weeks I've been working on the materials model for *Republic: The Revolution*. We're aiming at supporting some pretty realistic materials for the game. They'll support features like bump maps, reflection, specular highlights, specular bump maps, blended textures, transparent textures, and on and on. It's a fun area of the game to work on, and once Alan's lighting is fully implemented we should start getting some very pretty results."

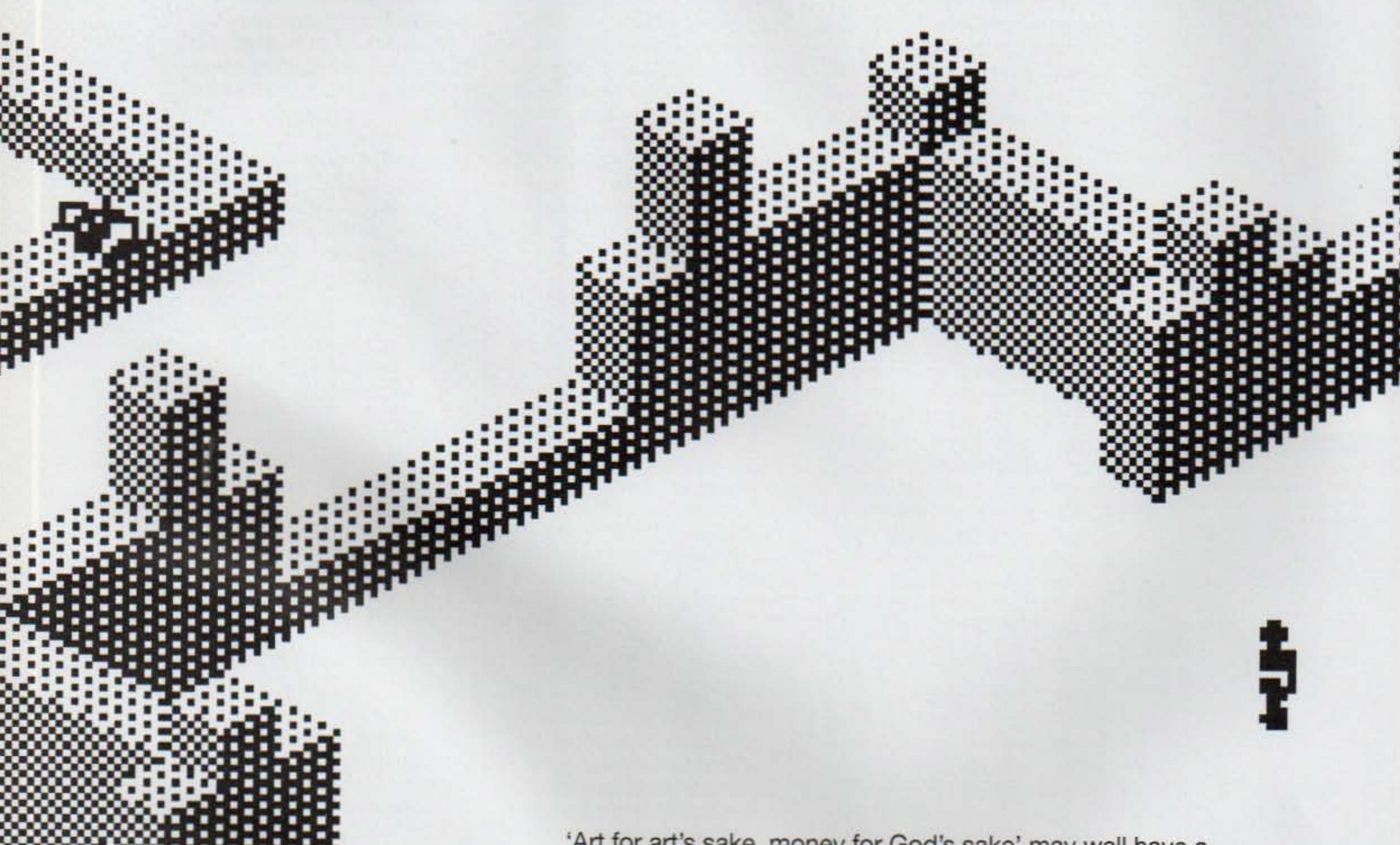
Elsewhere in the company the focus has been on achieving an important milestone for *Republic: The Revolution*, called First Playable. As the name suggests, First Playable is the point at which you've proved that the game works, and to do this you need a game level that demonstrates working technology and gameplay. Usually you aim to achieve this stage eight to ten months before release.

First Playable is the point at which you've proved that the game works, and to do this you need a level that demonstrates working technology and gameplay

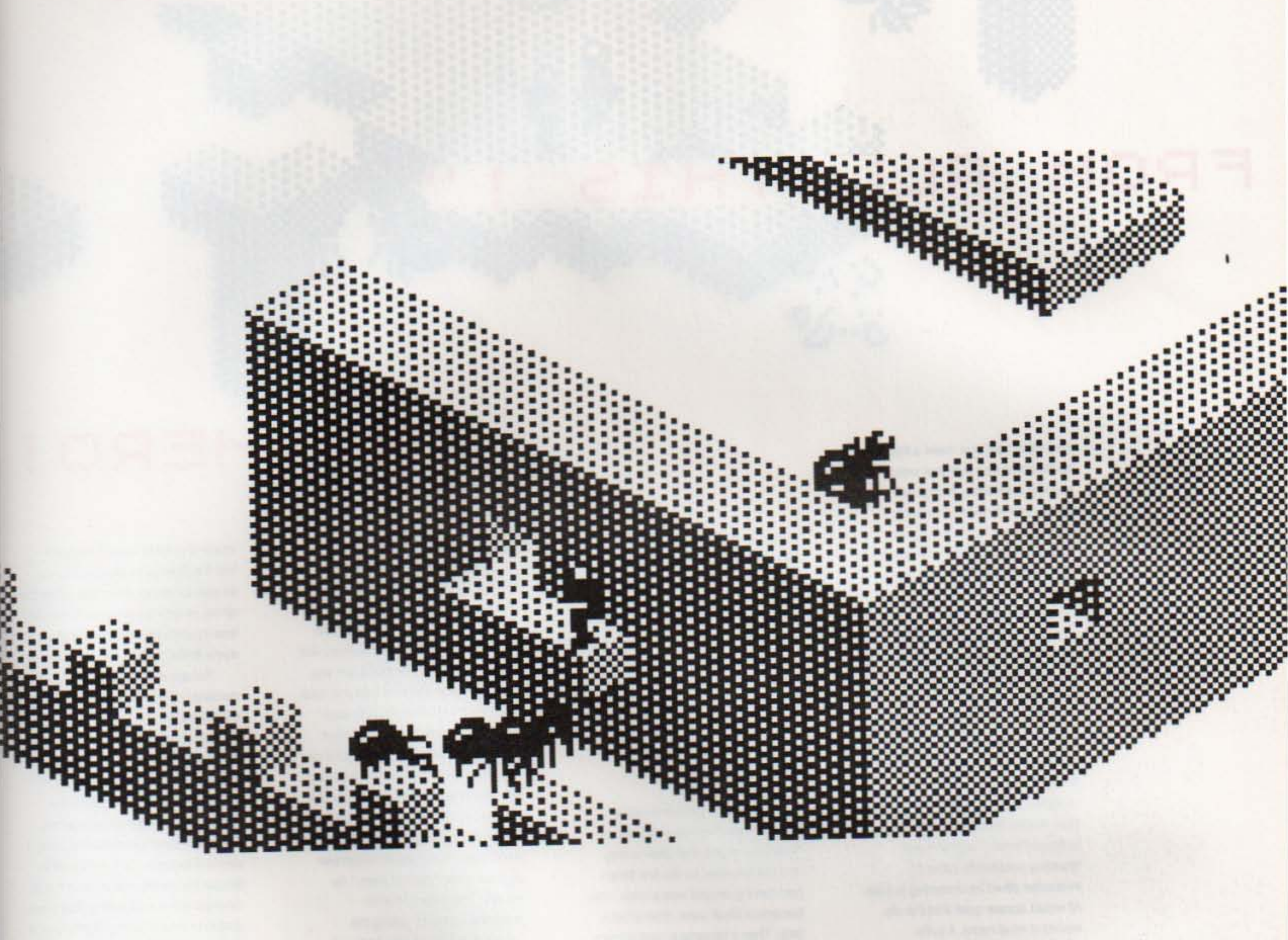
To help us achieve this target we've recruited an internal producer, Adrian Bolton. His job is to tie together the three disparate and occasionally warring strands of games production (design, programming, and art). Despite his role as office governor, Adrian quickly established himself as firm office favourite by spending £1,000 on games for the games room, although I can't help but wonder whether we'd have been better off just buying a Dreamcast and a copy of *Soul Calibur*, which is an Elixir obsession. I'm happy to report that this hasn't gone unrewarded, with Aamar officially crowned London *Soul Calibur* Champion at the recent regional championships. He went on to the national championships and came a very credible third. For those of you who care, the consensus is that Cervantes is by far the best character in the game.

The making of...

Ant Attack



'Art for art's sake, money for God's sake' may well have a peculiar resonance for Sandy White, creator of isometric groundbreaker *3D Ant Attack*. **Edge** talks to the sculptor-turned-coder about his early encounters with the industry



Argonaut's *Alien Resurrection* currently leads the field in videogames which set out to fray the nerves and set the pulse racing, but back in 1983 an art student from Edinburgh was already finding ways of making the humble ZX Spectrum do the same. *3D Ant Attack* may not have managed to make it into **Edge**'s top 100 games, but it marked the very beginnings of the survival horror genre. A full year before *Knight Lore* was released it also became the first example of a game developed with the action viewed from an isometric perspective.

Today it is difficult to look at those shaded walls and tiny sprites without raising a supercilious smirk, but in its day *3D Ant Attack* was the most terrifying experience you could have on a home computer. Armed with only a limited supply of grenades and with a severe time limit you had to sneak into the infested city of Antescher and rescue your trapped partner. Interestingly, *3D Ant Attack* was also the first game to offer the choice of playing as either a boy or a girl.

However, *3D Ant Attack*'s creator **Sandy White** was not your typical bedroom coder. He learned his trade from very different beginnings. "Before writing *3D Ant Attack* I was studying at Edinburgh College of Art," he reveals. "For much of that time I had been up to my elbows in plaster of Paris, ribbon cable, radio control servos, and Christmas tree bulbs. At the end of '82 I had my own one-man show which featured three storytelling computer-controlled sculptures, each based around the SC/MP chip that was in Sinclair's first computer, the MK14 – that's how I learned to program."

By this time he had been truly bitten by the programming bug. A period on the dole gave White the extra incentive to turn his experiments into a living, breathing game world. The inspiration for the title, however, derived from an incongruous origin. "I had just seen 'Superman' the movie, because the

Format: **ZX Spectrum 48K**
Publisher: **Quicksilva**
Developer: **Sandy White**
Origin: **UK**
Original release date: **August 1983**

"TAKE ME AWAY FROM ALL THIS !"

"MY HERO!

next thing I did was make a little sprite which flew over this weird random landscape, though as history tells, it never occurred to me to make a 'Superman' game. At this stage I was still thinking about the sculptural possibilities. Later on it became apparent that there was a striking similarity between the isometric structures in *Ant Attack* and etchings by M C Escher; the city was eventually named Antescher in tribute."

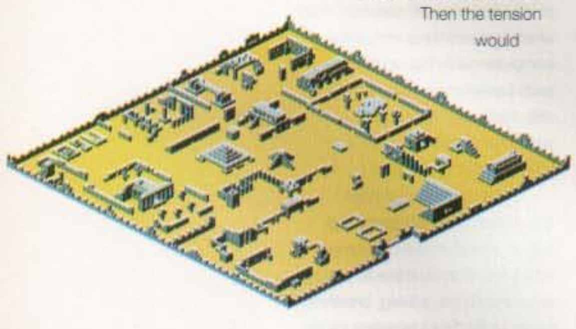
Although the buildings contained in the city were blocky, clearly defined structures were noticeable. Indeed, the church and graveyard were designed by White's girlfriend at the time, Angela Sutherland, who went on to found Perfect Entertainment. Standing outside the gates of Antescher could be unnerving in itself. All would appear quiet and the city devoid of inhabitants. A jump command was included to enable the hero to scale certain edifices and cross the city's threshold. Then the tension would begin to mount. It was possible to slowly make your way into the heart of the seemingly deserted city, but once a giant ant became alerted to your presence it wouldn't take long for more to follow. Dispatching initial attacks was essential if your position was not to be overrun. Standing stranded and defenceless on a hill as more and more rapacious insects swelled the ranks of your attackers could be a truly disturbing experience.

The swarming routines were one of White's first considerations: "I had this engine that drew cubes and did little else, so the first thing I had moving around was a cube. This became a black cube, then a black blob. Then it became a herd of black blobs. What had become interesting to me were the flocking properties that grew out of simple rules given to the blobs. They could be made to either seek or avoid a cube that you could control with the keyboard. I did at one point consider doing a sheep farming game. I bet that would have been a big seller.

"Anyway, eventually in went a couple of human characters, and because of a bug one of the blob sprites was drawn as a human and started to follow the other human. *Ant Attack* was born. The blobs got legs and it became a kind of hide and seek while avoiding the blobs-with-legs."

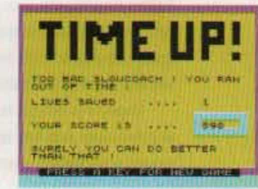
White created one of the most tense and exciting games for its time, and the coding behind the endeavour was anything but simple. Without the community that exists today he had to learn everything through trial and error. "I was not using an assembler as I had never heard of them," he recalls. "This meant I had to assemble by hand, writing the mnemonics on a sheet of A4 and shoving the op-codes in the margin. Trouble was, when you wanted to insert a line somewhere you had to go back and recalculate all the jump offsets – it was hideously slow. Once the hex was put together on paper it was typed into my Softy. The Softy was a ROM emulator with four whole K of RAM which I mapped into the Speccy's memory map via its rear connector. This meant that the whole of *Ant Attack* had to fit into 4K, leaving aside the data for the city, and some BASIC for the scoring screens."

Though the game was only half complete, White was confident it had the potential to be a commercial success, but publishing was slightly less well organised in 1983 than it is today. "My first thought was to try Sinclair themselves, as they were already publishing their own games. Being very paranoid about the code, I sent a videotape of *Ant Attack* off to Sinclair Research, only to have it duly returned with a note saying they were unable to view it as they didn't have a VCR. Looking around Smiths the following day I picked on Quicksilva as a good alternative, as they were the only publisher at that time who had put out a game with a colour sleeve. Everyone else was still at the stage of selling cassettes with black-and-white inserts – many of them simply photocopies, believe it or not."



Ant Attack was one of the first games to take place in a fully formed city. Spectrum fanatics started mapping immediately







At a press conference White was asked by a journalist about the incredible new perspective in *Ant Attack*. Somewhat lost for words he remembered an old sculpting term: 'isometric'. The term stuck and has since entered the gaming lexicon





BITTEN



He telephoned Quicksilva, but the company was more than sceptical about a game which had characters climbing over 3D scenery and through windows on the Spectrum. But after sending a videotape, the company was convinced. "We were picked up by Rod Cousens (who went on to become an Acclaim supremo) at the airport, and transported to Quicksilva's Southampton office, cramped into the back of a Ford XR3i. Negotiations began. I thought 50 per cent was a reasonable sort of start, if a bit generous to Quicksilva, given that they had done none of the work. Yes, perhaps I was a bit naive. I insisted I would go no lower than 25 per cent. I think eventually they offered 20 per cent and locked us in the Post House Hotel until we agreed. We sneaked out early the next morning and flew back to Edinburgh without telling them. The next day I got a call, and they offered 25 per cent. Oh yes, we'd been very clever, but not clever enough to specify what it was 25 per cent of. Eventually I found I was getting 25 per cent of the 'returns', which means a quarter of what comes back from the shops, ie 25 per cent of 50 per cent, or 12.5 per cent-ish. A pretty average deal. You live and learn, as they say."

The deal done and dusted, White had still to complete the game: "Panic ensued. The scoring screens were written in BASIC for speed, meanwhile the cover artwork was being created, blurb written and the game renamed by Quicksilva from *Ant Terror* – my brilliant name for it – to *Ant Attack*. I believe they bought the name for a few a few hundred quid from someone else who had written another *Ant Attack*. Wonder whatever happened to that?"

Press launches for games were rare in the early '80s, and White vividly remembers hitch-hiking down to London to see the product for the first time at a computer show at the Barbican. "Everything was very homely," he remembers. "There, standing at a tiny stall with a massive pile of *Ant Attack* tapes, were the founders of Quicksilva. They were selling copies as if they were hot cakes. Some bloke called Jeff Minter from the stall opposite had apparently been asked what he thought of it and said it wasn't bad."

But for those who believe there is no heart in publishing, White recalls one moment which reaffirmed his belief in the industry. When the day drew to a close it became apparent to John Hollis – co-founder of Quiksilva – that White and his girlfriend had nowhere to stay. "We were both on the dole," explains the coder. "But in a gesture I'll never forget, John opened the till, reached in and removed its entire contents, and thrust them into my hands. Later, from the security of our posh hotel room, we counted many hundreds of pounds – more dosh than either of us had seen in one place, ever."

Have another go!

RESET

Where yesterday's gaming goes to have a lie down

reload

Examining gaming history from **Edge**'s perspective, five years ago this month



Issue 29, February 1996

In an era of transition, conspiracy theory culture can prevail. **Edge**'s N64 blueprint issue set out to clear some of the rumour and conjecture surrounding the console, but arrived too late for some. 'The official blurb is that [the four ports on the front of the N64] are for four players, but could it be that two ports are allocated to each player – one port for the pad and another for a VR head set?' wondered reader Simon James.

Yes, it was the start of 1996, and headset fever was still in full swing, with more news on the arrival of fresh arcade hardware from all of the 'VR heavyweights', shown off at the 77th International Attractions and Amusement Park Association exhibition. Elsewhere, **Edge** covered the launch of Nvidia's Diamond Edge (no relation) – optimised for 'the PC's future, *Windows '95*' – and took a dry look at the world of Usenet, but make no mistake, this was a Nintendo-centric issue. Miyamoto-san and Howard Lincoln, then chairman of Nintendo of America, both gave opinions on their new toy, and Jez San offered his considered verdict too: "The joystick is unusual looking, but I like the controls. The thumb control feels nice and strong and sensitive."

DID THEY REALLY SAY THAT?

Balance Of Power creator **Chris Crawford** on sex in videogames: "The question is, are we going to go around stuffing tissue paper in the bras of our games? I for one am not going to do that."

DID EDGE REALLY SAY THAT?

"If you have faith in the Amiga surviving until 1997, it may be advisable to wait for the new Amigas!" A stray exclamation signals **Edge**'s arousal at the prospect of new Commodore hardware.

TESTSCREENS (AND RATINGS)

Ridge Racer Revolution (PS; 7/10), *Sega Rally* (Saturn; 8/10), *In The Hunt* (PS; 4/10), *The Dig* (PC, 8/10), *Indy Car Racing 2* (PC; 5/10), *Virtua Cop* (Saturn; 7/10), *PO'ed* (3D0, 7/10), *X-Men Children Of The Atom* (Saturn; 8/10), *Namco Museum Volume 1* (PS; 7/10)


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6

1. Chris Crawford considers the busty future of gaming 2. Nintendo's new baby, and a proud relative from SGI 3. An ad for Online **Edge** – almost here, honest 4. Who wouldn't want this as the supercool future of the arcade? 5. *PO'ed*, apparently an enjoyable mix of *Doom*, 'Red Dwarf', and 'Under Siege' 6. A *Sega Rally* review cries 'Happy new year, Saturn owners'

pixelperfect

The industry's favourites from yesteryear. This month, Mucky Foot's **Mike Diskett** explains why he was, and still is, mad for *Oids*





Director Diskett enjoyed rescuing, and occasionally turning on, the tiny subjects of this ST title

It wasn't until I was on my third generation of home computer (VIC-20, CBM64, then Atari ST) that I discovered the perfect game, *Oids*, named after a race of three-pixel-high people you had to save from certain destruction. Like a cross between *Asteroids*, *Thrust*, and *Scramble*, you had to fly your craft through rocky terrain fighting the disconcerting push and pull of gravity distorters.

The enemy craft took many forms, and in an age when other games had bad guys flying in set paths *Oids* broke the mould. Adversaries would come at you from all directions, avoiding the landscape thrusters blasting out red hot jets as they braked hard in order to avoid overshooting you.

But the best bit was when you shot a prison full of Oids, being careful not to hurt them. Four tiny people would come running out, and even though they were only three pixels high you could see their joy as they waved up at your gleaming craft. You would land near them, and return them to the mothership. Under no circumstances would you spitefully take off just before they boarded and turn your thrusters on the poor tortured creatures.

I still play it now on my ST emulator. In fact, I recently tracked down the creator Dan Hewitt to tell him that the ST emulator scene includes an emulator specially written just to play *Oids*. He was well chuffed.

FAQ

Martin Kenwright

Managing director, Evolution Studios

Martin Kenwright's successful run as head of war simulation maestro DID ended painfully at the hands of publishing giant Infogrames. Now MD of Evolution Studios, currently working on the promising *WRC 2001* (**E**91), he is far happier.

What was the first videogame you played?
I played on a console once and I don't actually know whether it was a videogame. It was back sometime in the '70s, and I don't know whether it was some white plastic things moving – it was a driving game and I think it was actually rolling the plastic terrain underneath… is that a videogame?

What was the first machine you ever bought?
It was a TRS80 pocket computer. Thought it would do me good in school – it only had about 36 characters you could print on a line, but I convinced my dad that it would help him with his betting on horse racing and it was a sound buy.

Can you remember the first thing you created on a computer?
It was a MIG-27 for *Strike Force Harrier*.

"I think we're in the '30s equivalent of the film industry; we've just come out of black and white and we're looking at colour talkies"

My maths teacher caught me drawing rude pictures, there was some talk of expulsion, and soon afterwards I was offered a job to come and work on a computer thing. This was around when I was 17. One weekend later I'd done all of the graphics for *Strike Force Harrier*.

What's your favourite game ever?
I've no idea. I love the games I made. *EF2000*, for me, was the first that just made me lose myself – I was in some world where war was going on and it was the first thing that felt bigger than anything I could ever be involved with. But the actual game I really enjoyed most was an old Papyrus game, *Indy 500*, because I remember driving that all one night in my old office. I left work and drove home and must have still thought I was playing the game, as I whacked up my car.

What was the last game you played?
Other than this [*WRC 2001*], I tried to play Codemasters' *Colin McRae Rally*. And I must emphasise the word 'tried'.

How many hours a week do you play games?
Not enough, I really don't have the time. If I'm lucky, maybe an hour a week.

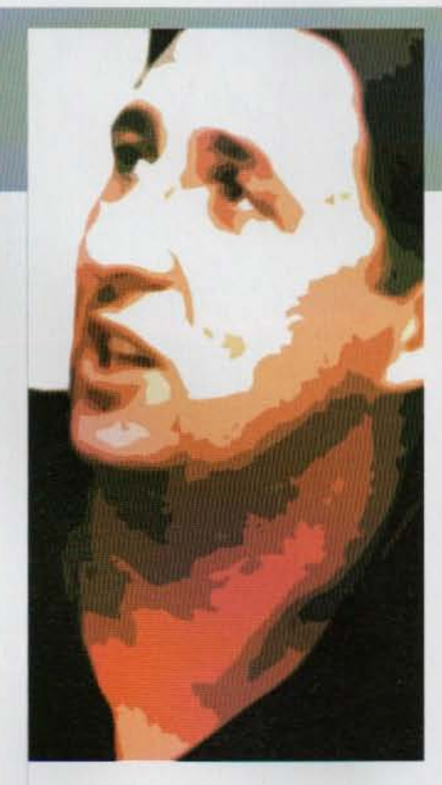
Which game would you have liked to have worked on?
I nearly worked on *Lemmings* – I remember Ian Hetherington a long time ago saying: "Dave Jones in Scotland is doing this game called *Lemmings*," and I thought, nah, that'll never catch on. I also worked on the early 8bit edition of *Tetris*, and didn't think that would be a big hit either. I'd have liked to have worked on a *Doom* game in the early days, I think.

Which elements of your current project do you think will impress gamers the most?
Seeing what we're attempting to do. We really are trying to think outside the box – I know it may sound like dull marketing speak, but when we're building it we look at each other as if to say 'is this for real'? To be able to go point-to-point across spectacular worlds, to be able to disintegrate cars, to be able to travel the world and just see graphics that are frighteningly realistic, I just think people will be overwhelmed full stop. We're trying to do for rallying what I've done for flight sims in the past.

What new developments would you like to see in the videogame industry?
I'd like to think that the games are just going to become a lot better – bigger, polished titles, a bit like the film industry. I think we're in the '30s equivalent of the film industry; we've just come out of black and white and we're looking at colour talkies. Just far bigger budgets, far more focused and far more considered games and a lot less of them, because at the moment the market is so saturated with conversions and weak games that I actually think it's hurting the market. People don't actually know what product to buy.

What disappoints you most about the videogame industry?
The relationships that exist between publisher and developer. I'm very fortunate now to finally be working with great partners like Sony, but it's a jungle out there and developers don't know – they go in wide-eyed and naive, and you can see why you've got so many spin-offs, bitter development teams, people who are burnt out, people who've been exploited, and it has to stop.

What do you enjoy most about working in the videogame industry?
It must be the long hours, no social life, lack of female company, and generally being a really sad bastard.



Whose work do you admire the most?
I like the stuff coming out of Japan at the moment, they're crossing the boundary, you know – the Konamis of the world, with *Metal Gear Solid*. Within a year or two, those guys are probably going to become the real special teams in the world.

Why do you think Japanese games tend to be well received in the west but not necessarily the other way around?
I think the Japanese have got far more animators, which lends itself well to create really interesting, visionary worlds. Maybe because they haven't got their own Hollywood, all of the top talent and creativity ends up working on computer games instead. They just culturally embrace computer games far better, I think.

It's a bit like the way they make cars – they actually start to make games that people want, not what they may want to make. I mean I may be talking out of my arse, but what we see here in Europe is only the tip of the iceberg – they do produce thousands of poor titles, too, and we only just hear about the big hits. The Japanese have that ethos that software will make or break [a console], and they spend as much time nurturing and developing the software as they do the actual hardware. So maybe after that long garbled answer... I don't know. Can I just say: "I don't know"?

inbox

Communicate by post:
Letters, **Edge**, 30 Monmouth Street, Bath BA1 2BW
Or email:
edge@futurenet.co.uk

Regardless of the comments made by industry members in last month's piracy article, retail price is a massive factor in the debate. People compare games to CDs and DVDs and can't justify the extra cost, despite the longevity of decent titles.

Forty pounds is steep. People wonder why the game that cost £1m to make costs twice as much to buy as the film that cost £100m to make. For a long time we were told it was the high cost of manufacturing cartridges. It's funny how no one mentions that now music, film, and games share exactly the same medium.

Sure, there are other factors. Limited shelf life is one. You can't buy *Super Mario World* for the SNES in HMV any more, but you can buy 'Jurassic Park', which was released at a similar time (if my memory serves me well), so at best you may get three years of sales. That won't change until a standard is reached whereby a game today will work on a system in ten years.

If only the console manufacturers would get rid of the region chips (that everyone gets past anyway), then batch runs of videogames would never be so low that the price is affected. If they code multiple languages from the beginning, then there would be none of the 'delayed for translation' nonsense, and simultaneous launches could occur; making us happy because we get our games quicker, and them happy because they can produce a larger quantity to get a lower price.

I don't care what they say: if the price of games goes down, more will be sold. I remember that week when all retailers reduced all PlayStation games to £30 (from £40) – I bought three titles that I didn't want to pay £40 for. Due to the increased sales Sony dropped the prices to £30 permanently.

I am convinced that within a few years games will be racked like CDs in HMV, and each title will be around £20. That has got to be the future. Would **Edge** consider an article investigating costings, please, because I'm sure you will find it can only be positive to reduce retail prices, and the industry listens to you.

William Yately, via email

Edge's art monkeys will be on the case with a pie chart-style breakdown forthwith. In all seriousness, this is a hugely important point, and one that will be looked into with no small amount of diligence in due course.

I read with great interest your recent article on piracy within the videogame industry (**E**91), and despite a number of valid points, I fear that you have missed two of the key culprits responsible for the current piracy situation. Who am I referring to? The game publishers themselves and the videogaming press.

As an avid collector of videogames both old and new, owning an original copy is of high importance to me, and yet recently I could not resist the temptation to acquire a couple of pirated discs for the Dreamcast. The titles in question were two games I had been eagerly awaiting, namely *Jet Set Radio* and *Sega GT*.

Having read a glowing review of the import version of *Sega GT*, I booted up my copy in eager anticipation. One magazine had scored the game at nine out of ten; 'the Dreamcast's own *Gran Turismo*' another boldly claimed. What utter cack I was rewarded with. I thank my lucky stars that I will not be going out on launch day, as originally intended, to buy the game.

My point is, it is not just the pirates, casual or otherwise, who are 'stealing'. The publishers themselves are just as guilty of robbing the public. I agree that £40 is not a lot of money for a good game, but it is an obscene amount of money for a bad one. Walk into any high street games store and look at the amount of games there are for sale. How many are actually any good, let alone worth the investment? While software companies continue to rush out half-tweaked and substandard games, piracy can only be set to continue. How much money is the average gamer prepared to waste before he gets sick of paying £40 a throw for an hour's worth of mediocre entertainment? How do you convince somebody not to buy a pirated game when buying a good quality one is like becoming like finding a needle in a haystack?

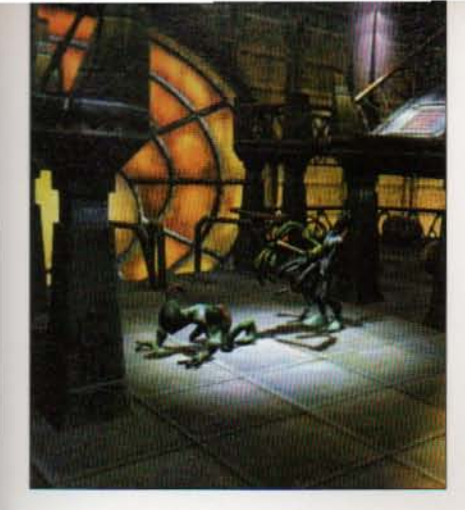
Ah, but what about the gaming magazines, you may say. They review the games, let you now what's good and what's rot so you know what to spend your hard-earned money on. If only that were true. With the possible exception of **Edge** (I actually appreciate your so-called 'harsh' scoring system), the majority of game magazines are just as guilty for piracy themselves – if anything, they are more guilty than the publishers. After all, as gamers we spend our money on these publications to tell us whether the games are any good. The result? There are going to be a lot of disappointed *Sega GT* owners on launch day.

Piracy may be a problem for the industry, but they need to look at the whole picture – prosecuting pirates is not necessarily going to solve the problem. How can the average gamer feel guilty about 'stealing' a game, when I suspect in many cases he feels he himself has been robbed on several occasions. More disturbing is the recent trend of publishers pushing new games on to the shelves before review because they



Marcus Wright believes that game publishers and the press bear a large proportion of the blame for piracy by producing and hyping games like *Sega GT*





Munch-obsessed 30-year-old Neil Armstrong feels completely let down by Oddworld Inhabitants' decision to drop PS2 development for X-Box

know they have a poor title. It hardly reflects an industry hard done by pirates; it reflects an industry that has grown to care more about money than the consumers it serves.

Thanks to piracy, come launch day, *Sega GT* can rot on the shelves for all I care. And *Jet Set Radio*? It will take a worthwhile place in my collection – £40 well spent on quality, considered entertainment.

Marcus Wright, via email

I don't really know how to express my utter bewilderment at finding out that Oddworld Inhabitants have canned the PS2 version of *Munch's Odysee* in favour of a wholesale switch to the X-Box. Apparently it will also be published by Microsoft.

Shocked, bewildered, angry, betrayed – all these things I feel, but as usual on looking deeper into the story it seems clear that it's all about – surprise, surprise – money.

Microsoft waves a huge wad of cash at Lornne Lanning and bingo, sold to the devil. Also, from what he himself says, this has been plotted by Microsoft for months. To add insult to injury Lanning says he wanted to make this announcement before anyone 'put money down' on a PS2. Oh, come on, with four weeks till launch? Cheers, mate, great help.

Do I sound bitter? Good, that's 'cause I am, having loved Abe and looked forward to the release of *Munch* for two years, I feel left cynical and hurt. Cheers, Lanning, you've made an old gamer (well, 30) very miserable.

Neil Armstrong, via email

This saga is an horrendously political one. Perhaps Oddworld would like to respond via these pages…

I was interested in the conclusion Steven Poole reached at the end of his 'Time: keeps on slipping' column in **E**90. The piece discusses the use of time in videogames, and concludes: 'The glory of videogaming ought still to be that it allows you to escape from time'; suggesting that games such as *Pokémon Gold* and *Silver* should not bother with the clever time-dependant features that are such an integral part of the gameplay, and (of course) offer Nintendo's marketing department some fantastic USPs with which to promote the game. Yet in an earlier paragraph he is praising 'the brilliant German film 'Run Lola Run" which shows three realtime 20-minute segments. So why does the author dismiss the 'seductive gimmick' of realtime games?

Surely this is just down to people's personal tastes? Not all games are suddenly going to operate in realtime because of *Pokémon*. Perhaps it's just a new genre? Why not say they should scrap driving games because I prefer walking round shooting people in slow motion as Joanna Dark?

I look forward to more interesting articles from the likes of RedEye and Steven Poole. And, yes, 'Run Lola Run' is a superb film.

Chris Hassell, via email

In response to the 'Diary of a videogame' article is **E**90, the issue arose concerning the lack of quality animators. I'm sorry, but I totally disagree. What I have found since working in this industry is that the majority of companies are really not interested in good animation anyway.

Most games nowadays have jerky, unconvincing animation, and this is, in my opinion, due to the fact that animators are generally not given a chance. Development houses are not worried about good animation because as long as the model has a few thousand polys, a set of vibrant textures, and has been motion-captured, they can get away with it.

I commend the guys at Elixir for their desire for good animation staff. However, there is a huge amount of talent out there. The real problem lies in the fact that, since there isn't a wealth of quality animation, the good animators are frightened off, thinking they will be limited by the restraints of the platform they'll be working on.

At the company I work for, we have thrown away motion-capture in favour of animation, purely because we are not satisfied with the limitations and huge expense that motion-capture presents. Instead, we have full control over every move in the game, and have the ability to create what we want when we want it. Genuinely talented animators are being pushed away because they trained in 2D or stop motion. Animation is animation, and, personally, I would like to see more quality animation from every studio – including the larger ones.

Dave Clements, via email

I have been staggered by the detail in the cities of *Metropolis Street Racer* on Dreamcast. So much so that I was desperate to get out of the car at one stage and check if a litter box was in the correct place, knowing the real-life equivalent so well.

It then dawned on me that an opportunity exists for someone to accurate map out every major city. These could be purchased by developers (much like using middleware) to alleviate the time constraints on a project, and allowing the developer to concentrate on gameplay.

'I am convinced that within a few years games will be racked like CDs in HMV, and each title will be around £20. It can only be positive to reduce retail prices'



Dax ponders border issues on PS2 software such as *Ridge Racer V*, a game which suffers in its PAL iteration

The potential isn't limited to driving games. RPGs, action/adventure, beat 'em ups, FPSs, and skateboarding games could all make use of accurate city builds. And wouldn't it be fantastic to play in your own home town?

This isn't limited to games, either. Imagine an online 3D map of your town where you could find a particular restaurant or monument. City planners could use the pre-constructed town map to show planned developments to sponsors and the public. Film makers could save on sets by utilising these maps instead. And in the future they would have a historical reference.

This sounds pie in the sky, but there is surely a lot of money to be made here, even if it takes years to accomplish?

Kay Muhnor, via email

Before I berate the likes of Namco for producing yet another sub-standard PAL conversion on *Ridge Racer V*, could **Edge** clarify exactly why this happens? Specifically: the electrical supply. Does the fact that a Euro console must utilise a 50Hz electrical supply actually mean its performance is slower than that of its 60Hz cousins in Japan and America? Is the performance of the console's chipset directly proportional to the electrical supply it's consuming? If the above is true, then what's the point in importing a US machine which, although designed for a 60Hz supply, must be plugged into a 50Hz supply over here? That would mean the processor is running at less cycles than intended resulting in skipped frames, and timing issues. Also, does drawing to a Euro TV screen (PAL) require more processor cycles than to a US or Japanese TV screen (NTSC)? Is this why we have 'letterboxing'? I'm sure a lot of readers wouldn't mind these issues clearing up once and for all.

Dax, via email

The PAL PS2 conversion issue isn't as straightforward as it might initially appear, and it doesn't apply to electrical power, it's a formatting and memory issue. A significant factor behind PS2 letterboxing concerns VRAM. Most developers are working with a resolution of 640x480 – the default format for NTSC screens. Because PAL displays are 640x512, 16 extra lines clearly exist at the top and bottom of TV screens, which costs VRAM to fill. And, with only 4Mb of VRAM available on PS2, it is at a premium, which has discouraged developers from nibbling away at it further. (Interlacing, where two 640x240 fields are created and alternately displayed, is common with PS2 games because of VRAM issues. With significantly more VRAM at their disposal, Dreamcast developers do not have to consider the interlacing 'trick'.) Ultimately, though, the best coders will still navigate around PS2 letterboxing problems, given time.

A reader since your first issue, I greeted your latest magazine revamp with great joy upon noticing that the music reviews had been dropped. How disappointing then to read yet another derogatory comment about the rock music genre in **Edge** 91 (page 55), just when I thought that it was something that the magazine had grown out of.

In answer to the rhetorical question posed, the rock music scene is massive in Japan, mainland Europe, and America particularly. My peers and I are all fans of heavy music and feel that just because we enjoy computer gaming we are not obliged to listen to computer-generated dance-style music. I pay no heed to inexpert game reviews which are frequently used to pad out the music press. Similarly, **Edge** would do well to continue giving its respected opinion on matters upon which it specialises. If I want to know about music I shall purchase the latest copy of *Terrorizer*.

Mat Pring, via email

A number of **Edge** staffers have music- and film-related journalism in professional print. Is that not allowed by your standards? Bottom line: there's a difference between poodle rock and rock. If the former is your bag, please buy a new pair of ears.

In response to Gavin Hodgson (inbox, **E**90), who laments the apparent failure of Nintendo to grow up, I would say to him and anybody else that you are really fooling yourself if you believe there is any such thing as an adult game, apart from *Who Wants To Be A Millionaire*. I mean, let's be honest, is there anything particularly grown up about pretending to be a top secret spy, infiltrating a secret lab? Ask Jenson Button how grown up he finds the latest Formula One games with their really realistic graphics. Don't get me wrong, I love videogames, but I don't kid myself into thinking they are something more than they are. My girlfriend and the majority of my friends see nothing particularly adult about me spending hours on a game trying to get the Mitsubishi Lancer with all the trick bits.

My favourite recent film was 'Toy Story' and my favourite book is 'Lord of the Rings'. Both of these appeal as much to a ten-year-old as they do to a 50-year-old, and yet neither of them would be called adult. Let Nintendo keep making their fantastic, fun games so that I don't have to worry about whether I'm an adult or not; I'd rather be a little elf chap who has to save a princess.

Jamie Barker, via email

'Let Nintendo keep making fantastic, fun games so that I don't have to worry about whether I'm an adult or not; I'd rather be a little elf chap who has to save a princess'



Kay Muhnor cites *MSR*'s expertly researched and rendered cities as an indicator of where gaming and other software environments may be headed

Next month: development hell

Edge explores the underbelly of the videogame industry in order to investigate what happens when things go wrong. (Warning: some testimonies may shock.)




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